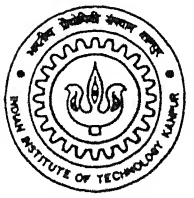
PRIVACY, SEATING PREFERENCE, CONTROL AND PEOPLE-ENVIRONMENT RELATIONSHIP: A CORRELATIONAL STUDY

A Thesis Submitted
in Partial Fulfilment of the Requirements
for the Degree of
DOCTOR OF PHILOSOPHY

by
NACHIKETA TRIPATHI



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CERTIFICATE

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SYNOPSIS

Name of Student: **Nachiketa Tripathi** Roll No. **9020066**

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Privacy is defined mainly in terms of selective control over interaction, whereby individuals can interact with others selectively, or keep to themselves, by their own choice It also implies controlled and selective disclosure of information about oneself

Privacy has been conceptualized in several ways, and some of its correlates have been examined empirically. But there is insufficient information pertaining to certain correlates of privacy.

The present research was undertaken in order to examine some unanswered questions that emerged from a review of the literature on privacy The major dependent variable was Privacy Preference, measured with the help of inventories (devised by the author for the purpose of the present research), and in the form of stated seating preference and seat placement. The independent variables were 1) the People-Environment Relationship view (Stokols, 1990), 2) the presence or absence of partitions, 3) the number of persons, 4) the sense of control over privacy, and 5) the

discrepancy between desired and actual privacy.

Adopting Westin's (1967) dimensions of privacy (namely, Solitude, Intimacy, Reserve and Anonymity), Altman's (1975) view of control as an important component or mediator of privacy preference, and Stokols' (1990) concept of People-Environment Relationship view, the following questions were examined in three different studies

1 What is the concept of privacy among Indians ? (Study 1)

2 What is the pattern of privacy preference for the various components or dimensions of privacy among Indians ? (Study 1)

3 How do Indians view the People-Environment Relationship(PER) ? (Study 1)

4 What is the relationship, if any, between privacy preference, on one hand, and People-Environment Relationship (PER) view as an indicator of the man-environment relationship, on the other ? (Study 1)

5 What is the effect of the presence or absence of partitions and the number of persons present on seating preference/ seat placement (as an indicator of privacy preference) in an office setting ? (Studies 2A/2B)

6 What is the nature of the relationship between privacy preference, the sense of control, and the discrepancy between desired and actual privacy ? (Study 3)

The hypotheses were based on the findings of previous studies related, not only to privacy, but also to related concepts such as territoriality, personal space and crowding

The major findings were as follows· The concept of privacy

was essentially similar to that proposed by Westin (1967) and included the components of Solitude/Intimacy, Reserve and Anonymity. In the case of PER view, the components included Utilitarian Attitude, Interactiveness/Symbiosis, Negative Orientation, and Spiritualism, which were discrepant in some ways from Stokols' (1990) view.

Privacy preference patterns supported expectations based on the collectivist, yet solitude-loving characteristic of the Indian culture Some of the PER view factors were found to be significant predictors of privacy preference factors. However, in the absence of sufficient information about possible mediating variables, these relationships were not easy to explain

The effect of partitions and the number of persons generally corroborated the findings of some earlier studies of privacy and crowding.

With regard to the relationship between privacy preference and the sense of control over privacy, in general, Control explained a fairly large proportion of the variance in most of the Privacy Preference factors. In the case of Desired - Actual Privacy Discrepancy, the only significant predictor of Solitude, Intimacy and Anonymity Preference was Solitude Discrepancy Overall, the relatively greater importance of the Solitude form of privacy was consistently revealed by the findings of all three studies An attempt was made to explain the findings in the context of the conceptualizations proposed in the literature

The present set of findings contributes to theory and empirical research evidence by further corroborating the basic dimensions of privacy, and by confirming the role of control in

privacy, although the nature of control is different from that proposed earlier. In terms of method, new inventories were devised to measure privacy preference, PER view and the sense of control over privacy

It was suggested that further research in this area should systematically examine other conceptualizations of privacy and their cross-cultural generality

Dedicated
to
My Mother

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Chapter 1

Introduction: The Concept of Privacy and A Review of the Literature

Affiliation, gregariousness or the tendency to be with people has been said to be one of the many innate human tendencies Societies seem to have evolved basically in accordance with this rather strong tendency In fact, being 'social' is considered to be an integral part of being psychologically 'normal'

At the same time, most people experience a need for privacy, in addition to a need for affiliation They enjoy the company of others and seek social support Yet there are occasions when a person wants to restrict these interactions in a desired way, one just wants to be with oneself For some people the need for privacy may be stronger than that for others There are differences in the way in which people control their interactions in order to obtain privacy, and in the extent to which they do so For example, sometimes a person just says "leave me alone", or leaves the company of others. At other times, he/she may remain in the presence of others, and yet actively avoid interacting with them to maintain privacy In other words, most people try to optimize their social interaction Although they remain 'social' they also try to exercise their freedom to get away from others, and be with themselves whenever they wish to do so - this is the experience of privacy.

The topic of privacy has been of interest to specialists in various disciplines such as psychology, philosophy, sociology, and architecture The layperson also is familiar with the meaning of privacy as a psychological experience However, in

the formal discipline of psychology privacy does not seem to have been studied extensively at the empirical level, despite its being an important aspect of social and personal life. In view of the relative lack of empirical research in this area, the present research was undertaken in response to some unanswered questions related to privacy, and the author's personal interest in some of the variables that influence the preference for privacy, keeping in mind the context of a non-Western culture such as India

The Conceptualization of Privacy

Several conceptualizations of privacy have been proposed in the literature Margulis (1977) has summarized the different views by describing the common meanings, legal meanings, and empirical meanings of privacy He discusses some of the definitions of privacy given by researchers which highlight various socio-psychological aspects of privacy To streamline the present discussion, the major conceptualizations of privacy relevant to the present research are being described below

First, as mentioned earlier, from the layperson's point of view, the most common meaning of the word 'privacy' is solitude or being away from others However, this does not imply a negative social orientation or even withdrawal Rather, it indicates the need of every individual to keep some aspects of one's life away from surveillance by others, and known only to oneself Some attempts have been made to present a more refined conceptualization of privacy, to show that there are other aspects of privacy besides solitude Westin (1967) described

four dimensions of privacy, namely, Solitude, Intimacy, Reserve and Anonymity. Whereas Solitude implies that the person wishes to be physically alone with his/her thoughts, Intimacy implies interaction with a person, or persons to whom the individual feels close Others are excluded from this interaction Reserve implies that the person is actively avoiding interaction even in the midst of, or presence of others This is achieved by creating a socio-psychological barrier between the person and others, and refraining from giving any signals that indicate a wish to interact In the case of Anonymity, again, even though others are present, the person interacts minimally with them, and does not want to be identified personally Proshansky, Ittelson & Rivlin (1970) suggest that Westin's four components or dimensions can be classified into individal states of privacy (solitude and anonymity) and group states of privacy (intimacy and reserve) Moreover, a person may prefer one or more of these forms of privacy depending on the setting or situation. For example, employees in offices may maintain solitude while at work, and may show reserve when relaxing during a break, but may prefer intimacy after office hours

A second conceptualization of privacy involves an emphasis on its biological origins (Klopfer & Rubenstein, 1977) This view argues that privacy is a form of withdrawal from others, and this tendency is found in both animals and human beings What is conventionally called 'territoriality' is a form of privacy, that is, the tendency to go into individual seclusion or small-group intimacy Moreover, privacy is essentially a regulatory mechanism that " serves to selectively control access of

external stimulation to one's self or the flow of information to others" (Klopfer & Rubenstein, 1977, p. 53). Furthermore, the biological component of privacy is evident in the commonality among animals and human beings in its major forms, namely, physical separation and information management, and in the reactions to violation of privacy.

A third way of conceptualizing privacy is to view it as a response to the environment, both physical and social This environmental aspect is exemplified in the research on concepts such as territoriality (Altman & Chemers, 1980; Edney, 1974, Newman, 1972, 1980), proxemics and personal space (Hall, 1959, 1966, Hayduk, 1985, Sommer, 1969) and reactions to density and crowding (Calhoun, 1962; Stokols, 1972, 1978, Sundstrom, 1978) Territoriality refers to the maintenance of a physical boundary around oneself, and the tendency to protect or defend this space against intruders Territoriality is said to have biological roots, and is found in both animals and human beings Dominance and control in social relationships, personalization through the use of markers, and ownership of a defined space (such as a room, an office or a house) have been said to be components and indicators of territoriality (Edney, 1974) The most common reactions to invasion or infringement of a territory are defence and aggression, depending on who the intruder is Distinctions have also been drawn between reactions made to intrusions of public or private territories Newman (1972, 1980) proposed the notion of defensible space, suggesting that crime in residential areas would be less frequent, and

residents would feel more secure if barriers are provided that allow surveillance of suspicious activity. In other words, reaction to invasion of one's territory is influenced by the relationship between the person and intruder, as well as the nature of the physical territory. This resembles privacy in that invasions of privacy also receive positive or negative reactions depending on the two variables Moreover, as in the case of territoriality, the need for privacy in specific situations may also be indicated by the use of markers (for example, a "Do not disturb" sign) Control, in the sense of freedom and choice in interaction, has also been used as to define privacy, as will be seen below

Personal space has been defined as " an area with invisible boundaries surrounding a person's body into which intruders may not come" (Sommer, 1969, p 26) Personal space is known by the interpersonal physical distance maintained by individuals, and by the "flight or fight reactions' to invasions of personal space In the case of personal space also, several determinants, such as the nature of the setting, the relationship between the person and others, and personality factors, have been identified (Gifford, 1987, Sommer, 1969) The similarity between territoriality, personal space and privacy may be clearly seen in all three, the reaction to intrusion is negative, but may be modified by the nature of the relationship In all three, intrusions are prevented by using mechanisms such as markers on physical space Yet there are psychological components of privacy that distinguish it from the other two concepts

A third form of responding to the physical-social environment

is crowding, best described as a reaction to socially and/or spatially dense settings A distinction has been made between density and crowding by pointing out that whereas the former is defined totally in spatial or physical terms, the latter involves a stronger psychological element Basically, crowding represents a response to the presence of too many people in a setting. The explanations proposed for the experience of crowding include the concept of overload, or the presence of too many inputs (Milgram, 1970), behavioural constraint, or a restriction of behavioural choices or freedom thus creating psychological reactance (Stokols, 1976), overmanned or overpopulated behaviour setting, that is, a setting in which there are more people than are necessary for stable patterns of role expectations (Barker, 1968), and in terms of thwarting, or social interference (Stokols, 1976) All of these imply that in crowding an individual experiences a restriction on his/her physical movement, and also an intrusion into one's territory, personal space and privacy Thus reactions to crowding and reactions to violation of privacy would have some characteristics in common

Apart from the physical-environment components described above, Archea (1977) has proposed a model that focuses on communication aspects of privacy with respect to the physical environment, and has considered specific features such as <u>visual access</u> ("the ability to monitor one's immediate spatial surroundings by sight", p 123), <u>visual exposure</u> ("the probability that one's behaviour can be monitored by sight from one's immediate physical surroundings", p 124), <u>gradients</u> (" abrupt

changes in the amount of ambient information available in the immediate vicinity of openings and edges in surrounding visual barriers", p. 125), terminals (" a point within an informal social setting at which information is either entered into or retrieved from a formal communication network or information storage system", p 126), and decoding ("detecting and assessing the significance of the interpersonal opportunities", p 127), encoding ("accommodating or responding to changing social demands by imparting the appropriate meaning to one's own behaviour", p 127), and precoding (previously encoded information).

The components described in the model can be incorporated into architectural design in order to ensure privacy Archea (1977) suggests that privacy may be seen as an "information distribution process" (implying a selection and control in the information presented) This can be achieved by selecting and modifying physical settings For example, arranging chairs and tables in a certain way, or using barriers such as partitions can regulate the extent as well as the form of interaction in a setting, thereby regulating information distribution This is illustrated by the notion of sociopetal and sociofugal spaces - spatial arrangements that bring people together, or place them apart from each other, respectively (Osmond, 1957).

A fourth view of privacy is based on the notion of control and choice of interaction as a major component "Selective control over access to the self or to one's group" (Altman, 1974, p 6), "negation of potential power relationships" (Kelvin, 1973, p 254), "control of stimulus input from others, degree of mutual knowledge and separateness of people from one another" (Simmel,

in Altman, 1974, p. 5), and " .the claim of individuals. . to determine for themselves when, how and to what extent information about themselves is communicated to others" (Westin, 1967, p 7) are some of the ways in which the control/choice component of privacy has been incorporated into its conceptualization Freedom and choice in one's behaviour as a component of privacy has also been proposed by Proshansky, Ittelson & Rivlin (1970) In other words, privacy may reflect the sense of control, or freedom of choice that an individual has in terms of choosing or restricting social interactions

Altman (1975, 1977) further elaborates on the characteristics of privacy by pointing out that privacy involves (a) boundary control, or selectively including or excluding others, (b) optimization, or finding the right amount of interaction (being alone or with others, when one wishes), and (c) multiple mechanisms, that is, the use of various means to achieve different forms of privacy These include non-verbal behaviour, and the expectation of specific social conventions, such as knocking on the door before entering a room

Another important aspect of privacy that Altman draws attention to, is the cultural context Considering the question of the cultural universality or specificity of privacy regulation, Altman (1977) cites several examples to show that the need for privacy is culturally universal, however, the means that are used to regulate or achieve privacy vary across cultures By examining the ethnographic details of societies that seek maximum and minimum privacy, Altman inferred that the cultural

component of privacy includes (1) a culturally universal process involving dynamic, dialectic and optimization features, and (2) a culturally specific process that results in the use of mechanisms for regulating social interaction.

A fifth view of privacy is one that relates it to self disclosure, or "the verbal transmission of information about oneself" (Derlega & Chaikin, 1977, p 103) Earlier research on the topic of self disclosure (Jourard, 1966) did not directly yield much information on privacy as defined in the existing literature However, if privacy is acknowledged to be an interaction-regulatory, or "interpersonal boundary process" (Altman, in Derlega & Chaikin, 1977, p 103), and also a process of information management (Klopfer & Rubenstein, 1977, Laufer & Wolfe, 1977), then it is easy to see that self-disclosure must be an important determinant of privacy regulation This brings into the picture other aspects of social interaction such as self-presentation (Goffman, 1963, Jones & Archer, 1976) A low level of self disclosure in order to preserve privacy is strongly reminiscent of the concept of secrecy However, although privacy and secrecy may be related concepts, the distinction between the two has been pointed out by Warren and Laslett (1977)

To sum up, then, it may be said that privacy is a multi-faceted concept, consisting of both social and psychological components The multidimensionality of this concept is highlighted by Laufer and Wolfe (1977) in their description of three major dimensions of privacy, namely, the self-ego dimension, the environmental dimension, including the cultural, sociophysical and life-cycle elements, and the interpersonal

dimension, including interaction management and information management Control and choice are seen as mediators in privacy regulation This view encompasses most of the conceptualizations described above

In other words, privacy may be examined a) in terms of the dimensions it includes, b) as a biological tendency, c) as a response to the physical-social environment, and as a communication signal, d) as a part of self-disclosure and self-presentation, and e) as a control or regulatory mechanism exhibited in interaction and information management In all of these views, the multidimensional and culturally responsive nature of the concept of privacy, and privacy regulation become evident Although the theoretical conceptualizations of privacy have taken into account various aspects, systematic and extensive empirical research on the subject is in its infancy, as the review of literature presented below will indicate

Privacy research: A review

Beginning with studies of privacy, a survey of the available literature shows that personal/ demographic correlates, personality correlates, situational correlates, and some physical-setting correlates have been examined in relation to privacy For example, age as a demographic correlate has been found to influence the concept of privacy in four to seventeen-year-old subjects (Wolfe, 1978) Whereas 'being alone' as the concept of privacy was mentioned by children of all ages, the younger children mentioned this aspect less frequently than older subjects Control and information management as components of

privacy were mentioned mostly by subjects in the 13 to 17 year range. With respect to gender, some differences have been reported Considering the disclosure aspect of informational privacy, it has been found that women make more intimate disclosures than men (Rubin & Shenker, 1978), but women prefer environments that permit controlled disclosure more than men (Firestone, Lichtman & Evans, 1980). An interactive effect of gender and other situational/ setting variables has been mentioned in a study by Walden, Nelson, and Smith (1981) Males in dormitory residences were found to vary their privacy preferences depending on the number of persons (2 or 3), but women showed no such difference in privacy preference This finding is similar to that found in crowding studies which indicate that women react more favourably than men to crowding (Aiello, Epstein & Karlin, 1975; Epstein & Karlin, 1975, Freedman, Levy, Buchanan & Price, 1972; Stokols, Rall, Pinner & Schopler, 1973). With regard to personality correlates, individuals who felt that they did not have sufficient privacy were found to be more distractible those who had adequate privacy (Marshall, 1972) A lower sense of well-being, greater anxiety, and weaker ego-strength have been reported in persons with a high need for privacy than those with a low need (McKechnie, 1974) Pedersen (1982) found that those who prefer solitude and are reserved show low self-esteem Persons who are introspective are less likely to seek intimacy with their family and are more likely to be reserved. Perceived sense of control is related to privacy preference depending on the setting In a study by Smith

(1982), in a less spacious environment, prisoners showed a negative relationship between the sense of control over their lives, and the preference for solitude and reserve But when they moved to more spacious quarters, this relationship was a positive one Other forms of control, such as control over information about health and about themselves, and control over what a person pays attention to, have also been examined as components of privacy (Gifford, 1987) The findings suggest that a sense of control leads to a stronger sense of freedom, something that has been defined as an integral part of privacy by some authors (for example, Altman, 1975) With regard to physical settings, most findings consistently show that settings that provide enclosures (such as partitions in offices) and therefore greater privacy, result in greater satisfaction, than those devoid of such privacy, such as open-plan offices (Oldham, 1988, Sundstrom, Herbert & Brown, 1982). Moreover, living in certain physical environments affects the preference for privacy Marshall (1972) found that people sharing rooms in residences, or living in houses with an open plan showed a lower privacy preference than people living in other kinds of environments Among prisoners, moving from less private quarters to more private ones did not change privacy preference, but it did increase their expectations of solitude and intimacy (Smith, 1982) However, this change in expectations was not borne out in at least one other study (Walden et al 1981) With respect to informational privacy as indicated through self disclosure, rooms with cushioned chairs and rugs providing a 'softer' environment elicit more self disclosure than rooms without such furnishing (Chaikin, Derlega &

Miller, 1976).

Apart from the physical setting, the social situation may also affect privacy needs For example, in a study by Stone, Gueutal, Gardner & McClure (1983) subjects indicated varying preferences for different kinds of informational privacy depending on the nature of the organization which sought information from them. The key factor in such situations seems to be control over information (Gifford, 1987)

In addition to the correlates mentioned above, there is evidence of cultural differences in privacy preferences Gifford (1987) cites studies that have indicated such differences. For example, in the Arab and Indian societies, housing patterns provide very little privacy, nor do members of these societies wish for more privacy by maintaining greater distances from their neighbours In Patterson and Chiswick's (1981) study of longhouses in Sarawak, Borneo, it was found that there is little physical privacy, but social conventions ensure privacy in the social sense Similar social conventions have been devised in the Gypsy society (Yoors, 1967) The cultural dimension of privacy was elaborated on by Altman (1977), indicating that some components of privacy are culturally universal (for example, the need for privacy), while others are culturally specific (for example, the means used to achieve privacy). In addition, certain cultural characteristics such as collectivism (Hofstede, 1980), and poverty or overpopulation resulting in lack of space, might lead to lower privacy preference (in the sense of solitude) among certain cultures (for example, India)

Another broad possibility that remains unexplored is that the different cultures might inculcate different views of the person-environment relationship, thereby encouraging varying values. Such values might influence both the concept of privacy, and the means of privacy regulation in these cultures For instance, certain cultures (such as the Indian, and some other non-Western cultures) seem to emphasize a symbiotic or spiritual, rather than an instrumental relationship between the individual and the natural environment, including other people. In the context of such a view of the person-environment relationship the control or freedom aspect of privacy may not be very strong It is possible that because of such a world view, individuals might define the concept of privacy itself in a way that is different from that in Western cultures Alternatively, the concept of privacy might remain essentially the same, but the preference for certain forms of privacy (for instance, solitude and intimacy) might differ across cultures The cultural component of privacy can be understood better by comparing different cultures

Some information about privacy might be gathered from findings related to territoriality Empirical research in this area may also be classified in terms of various determinants of territorial behaviour Considering personal/ demographic determinants and correlates, gender differences have been reported. In general, men have been found to have a larger territory than women (Mercer & Benjamin, 1980) With regard to personality variables as correlates of territoriality, dominance would be expected to be related positively with such behaviour,

as suggested by Edney (1975). This was found in a study of dominance hierarchies by Esser, Chamberlain, Chapple and Kline (1964). The role of the physical setting in determining territoriality has been shown in studies that empirically examined Newman's notion of defensible space Settings that permit surveillance of antisocial behaviour with the use of devices such as powerful spotlights show a lower frequency of crime than those devoid of such means of surveillance (Brower, 1981; Brown & Altman, 1983, Ley & Cybriwsky, 1974) Social-situational factors such as group membership have been found to be associated with dominance behaviour as an indicator of territoriality (Sundstrom & Altman, 1974) However, this relationship is not always consistent, and may be influenced by the kind of group members (for example, mental patients or corporate executives (Altman, 1975) The use of markers to indicate ownership of a territory was found to differ between two ethnic groups in a study by P. E Greenbaum & S.D Greenbaum, (1981). Residents of Slavic ethnicity were found to use personalized markers in their residences to a greater extent than their non-Slavic neighbours These findings might generally show that both territoriality and privacy might be influenced by similar determinants in similar ways However, a study by Edney and Buda (1976) explicitly examined the difference between territoriality and privacy by asking respondents in which kind of setting among the following they would prefer to carry out various familiar activities home territory with privacy (isolation), home territory without privacy, someone else's territory with privacy and someone else's territory without

privacy The responses showed that privacy and territoriality are two different concepts Further information was gathered on attribution of behaviour by the respondents It was found that in the absence of privacy (on home territory or someone else's territory) behaviour was attributed to others. When a territory was provided (with or without privacy), behaviour was attributed to one's own personality. This finding further confirmed the distinction between territoriality and privacy Similar findings were reported in a Japanese study by Iwata (1980) which compared space management in a crowding situation Altman (1975) sees privacy as the more fundamental concept, and territoriality as one of the mechanisms for maintaining optimal privacy

Some information pertinent to privacy might be gathered from the research on personal space Among demographic determinants of personal space, age differences have been reported In general, personal space increases with age (Hayduk, 1983) By the age of twelve, most individuals use personal space in the same way as adults (Evans & Howard, 1973) Gender differences have also been reported In studies conducted in Western cultures, the largest interpersonal physical distance is maintained between two males, and least between two females (Hayduk, 1981) However, other studies have shown different findings (Altman, 1975, Gifford, 1982, Kuethe, 1962, Kuethe & Weingartner, 1964, Lott & Sommer, 1967, Pellegrini & Empey, 1970) It has been suggested that differences in sex-role socialization may account for variations in gender differences in personal space Cultural and ethnic differences in personal space have been found by various

researchers For example, Hall (1959, 1966) compared Arab, French, South American, Japanese and English subjects with respect to the different interpersonal distances (namely, intimate, personal, social and public distances) He found that these zones varied across cultures in their size, but showed no difference in their order. That is, intimate distance was the smallest, followed by personal, social and public distance in increasing order. Watson and Graves (1966) found a smaller interpersonal physical distance among Arabs than among Americans Cultures have been classified into 'contact' and 'non-contact' cultures on the basis of personal space The former include Latin America, Spain and Morocco, and the latter, the U S As expected, members in the former cultures maintain smaller distances from each other than do the latter (Forston & Larson, 1968, Mazur, 1977) Interpersonal physical distance may vary across cultures depending also on the context or setting, as shown in a study comparing Japanese and American subjects (Sussman & Rosenfeld, 1982) The former maintained a greater distance than the latter when conversing in Japanese, but there was no difference when they were conversing in English. With respect to ethnic differences, Anglo-Americans have been found to maintain greater distances than Mexican-Americans or Puerto Rican Americans (Aiello & Jones, 1971, Baxter, 1970, Thompson & Baxter, 1973) With respect to Black-White differences within American samples, mixed results have been reported (Aiello & Thompson, 1980) Other studies have shown interactive effects between the three demographic variables just discussed. Thus age and gender interactions (Tennis & Dabbs, 1975) and age, gender and race

interactions (Severy, Forsyth & Wagner, 1979) have been reported by some investigators. With regard to personality correlates of personal space, Hayduk (1978) states that there is no consistent relationship between personality and personal space This could be due to methodological problems (Altman, 1975) However, some studies have reported significant relationships For example, introversion and anxiety are associated with larger interpersonal distances (Bailey, Harnett & Gibson, 1972, in Wrightsman, 1977, Karabenick & Meisels, 1972, Luft, 1966, Patterson, 1973, Weinstein, 1968) Extraversion, affiliativeness and interpersonal warmth are associated with smaller personal spaces (Cook, 1970, Mehrabian & Diamond, 1971, Patterson & Holmes, 1966) Gifford's (1982) study provided very similar information Larger, or abnormal patterns of personal space are also associated with personality disorders, as revealed in the finding that schizophrenics maintain larger interpersonal distances, and show greater variability, than normal persons (Horowitz, Duff & Stratton, 1964) The concept of a "body buffer zone" , based on perceived threat, was proposed to explain this finding Several situational factors influence personal space For example, personal space is influenced by social relationships (Sundstrom & Altman, 1976) As interpersonal physical distance varies, the degree of comfort or discomfort also varies, depending on the relationship Persons who have a close relationship, who are similar to each other, and like each other, maintain significantly smaller interpersonal distances than strangers and acquaintances (Aiello & Cooper, 1972, Heshka & Nelson, 1972,

Little, 1965; Willis, 1966). Negative social experiences such as dislike, insults and criticism, have been found to be associated with larger personal spaces (Guardo & Meisels, 1971; O'Neal, Brunault, Carifio, Troutwine & Epstein, 1980). Moreover, the nature of the interaction influences personal space. For example, seat-position preferences as indicators of personal space have been found to vary in the case of cooperation, casual conversation, competition, and coaction (Sommer, 1965) Leaders, or high status persons in a group typically prefer to sit at the 'head' of a table , likewise, sitting at the 'head' of a table encourages a person to take the leader's role (Bass & Klubeck, 1952, Steinzor, 1950, Strodtbeck & Hook, 1961) Sommer (1967) also found that in class discussions, students who performed well sat in the front or middle rows rather than the last row Seating patterns have also been found to influence communication in groups (Bavelas, 1950, Leavitt, 1951, Shaw, 1964) In addition, seating patterns and preferences are closely related to the nature of the interaction However, in such studies, eye contact has also been found to play a part Thus there is more interaction across the table (that is, face-to-face interaction) than there is between persons adjacent to each other (Russo, 1967, in Shaw, 1976, Steinzor, 1950) Other situational correlates of personal space are intimacy of the conversation leading to smaller interpersonal distances, position in the room, such as being in the corner or in the center (Dabbs, Fuller & Carr, 1973), and whether people are sitting or standing (Sommer, 1962) In short, a smaller interpersonal distance signifies a greater willingness to interact In terms of privacy, a smaller

interpersonal distance might signify intimacy, whereas a larger distance might suggest a preference for solitude or reserve.

The third area of research that yields information relevant to privacy is crowding. Most studies have shown negative reactions to crowding, most notably aggressive behaviour, as demonstrated in Calhoun's (1962) experiment. Such negative reactions are also found in the case of violation of privacy, or invasion of one's territory and personal space. Among demographic determinants of crowding, gender has been found to be a fairly consistent determinant, as is evident in the studies cited earlier In general, women show less negative reactions than men to crowding This has been explained in terms of the greater affiliativeness and the differential socialization of females The opposite finding has also been reported by some investigators (for example, Aiello, Baum & Gormley, 1981, Walden, Nelson & Smith, 1981) Among personality variables, locus of control has been found to be a significant correlate Subjects with an external locus of control show a more negative reaction to crowding than those with an internal locus (McCallum, Rusbalt, Hong, Walden & Schopler, 1979, Schopler & Walton, 1974) But some studies have shown the opposite finding (Aiello, Vautier & Bernstein, 1983) or no difference (Walden, Nelson & Smith, 1981) Persons high on sociability have also been found to react less negatively to crowding than those low on this variable (Miller, Rossbach & Munson, 1981) Several physical-spatial and architectural variables have been found to influence crowding For example, in the presence of partitions a greater degree of

comfort is reported in rooms with higher densities (Desor, 1972) This closely resembles the positive effect of partitions on privacy, cited earlier. However, the opposite effect was found in another study (a field experiment) by Stokols, Smith & Prostor (1975). This negative effect of partitions could possibly be due to the feeling of restriction and reduced sense of control brought about by partitions In addition, light-coloured rooms (Baum & Davis, 1974), high ceilings (Savinar, 1975, in Gifford, 1987), shorter rather than long corridors (Baum, Davis & Valins, 1979), and a sociofugal rather than sociopetal arrangement of seats (Wener, 1977) induced a greater sense of crowding than the opposite setting Some situational factors also influence crowding The presence of acquaintances rather than strangers, and recreational activity reduces the feeling of crowding (Cohen, Sladen & Bennett, 1975), but living in high-rise buildings increases it (McCarthy & Saegert, 1979) Among the psychological correlates of crowding perhaps the one that has shown the most consistent effect is <u>control</u>, which can be cognitive, behavioural or decisional (Averill, 1973, Schmidt & Keating, 1979). One or more of these forms of control may be perceived to be reduced in crowding. In general, a lowered perceived control leads to greater stress and therefore more negative reactions to crowding Moreover, perceived control affects attribution of behaviour in high-density situations (Schmidt & Keating, 1979) It may be recalled that in the case of privacy also, control in the sense of freedom and regulation of interaction has been said to be a key component (Altman, 1975), or a mediating variable Thus some common features would be expected between privacy and crowding·

both violation of privacy, and crowding elicit negative reactions. But the effect of specific determinants may be different in the two cases

As in the case of personal space, culture has been found to be yet another determinant of crowding. Comparing cultures, it can be observed that the reactions typically associated with high density, namely, aggression and high crime rate, do not necessarily occur in all high-density cultures. Blacks have been found to react more negatively to crowding than Hispanics, and the Chinese have been found to show less negative reactions to high density than subjects from many other cultures (Gifford, 1987) Possibly these cultures promote a sense of living together in harmony, because of which they do not view the presence of others as something unpleasant Moreover, if cultures already face a space scarcity (as in the case of overpopulated cultures), and have no option but to live in high-density conditions, the members may adapt to the situation and eventually experience less stress and competitiveness in the presence of others This aspect has been called competition tolerance by some researchers (Jain, 1987). Comparing this aspect of crowding with the available evidence on privacy, it would be expected that those who have a high privacy preference (especially for solitude) would shy away from social situations, and would react negatively to the presence of too many people

The studies described above have been conducted mostly in Western cultures With the acknowledgement that cultural differences do exist in the ways in which privacy is maintained,

it becomes meaningful to examine privacy preference and related behaviour in the context of non-Western cultures as well. This is an area where more planned empirical research is needed.

In this context, it should be pointed out there are hardly any studies on privacy, territoriality and personal space in the context of India Privacy does not seem to have been investigated, nor have territoriality and personal space been examined in the Indian context There are some systematic studies of crowding (Jain, 1987). In addition, the relationship between perceived control, relative power and crowding has been investigated, and the results uphold the importance of perceived control as a significant predictor of all other variables (Ruback & Pandey, 1991) Some of these findings may apply to privacy, however, a more analytical approach is needed in this direction The review presented above suggests that there are some similarities between territoriality, personal space and crowding, on one hand, and privacy, on the other The similarity may be seen both at the conceptual level, and in terms of some common determinants However, at least in the case of territoriality, it has been clearly pointed out that despite similarities, privacy differs in other ways from these three concepts, primarily in that it is more social and psychological, whereas territoriality, personal space and crowding indicate more physical-spatial responses to the environment One may look for a correspondence in the findings with respect to similar determinants of the two sets of concepts, but the distinctions should also be clearly understood.

Rationale for the Present Research and Choice of Variables

The rationale for the choice of variables in the present research can be found in the unexamined questions that emerged out of the literature review. First, there are very few empirical studies directly related to privacy although the other related concepts such as territoriality, personal space and crowding have received sufficient attention The latter research might help in making some inferences regarding privacy as well, however, it leaves several questions ambiguous or unexamined For example, there are some contradictions with respect to gender differences in privacy preference (as in the case of the other concepts) Besides, indicators such as seat preferences and seat placement, which have been examined more closely in the case of personal space, have not been considered in the context of privacy The latter might have practical implications in the designing of offices and residential settings Moreover, there do not seem to be many attempts to empirically test the theoretical conceptualizations of privacy described above Consequently, the finer aspects of privacy, and the distinction between privacy and related concepts, remain somewhat vague For example, if it is true that people feel more comfortable when they are away from the public eye, are within their territories and personal space, and away from a high-density situation, how can social facilitation effects (Zajonc, 1965) - that is, enhanced performance in the presence of others - be explained ? In the case of certain cultures, how can the tendency to maintain solitude be reconciled with the collectivist tendency to be with others ? In addition, there seem to be no attempt to relate

privacy to an overall philosophical view of the environment in relation to human beings, especially in the context of non-Western cultures

In other words, the following aspects seem to be neglected in the study of privacy, namely, a) the role of the general philosophical view of the person-environment relationship in determining the concept of privacy, and privacy preference,
b) the relationship between physical-spatial indicators of privacy preference, such as seat preference or placement, and other relevant correlates, and
c) the relationship between a sense of control and privacy preference/ regulation

With regard to method, there seems to be a serious lack of standardized tools for the measurement of privacy preference Some inventories have been devised following Westin's conceptualization (Marshall, 1972, Pedersen, 1979, Rustemli & Kokdemir, 1993) These inventories indicate essentially the same dimensions of privacy as those described by Westin. No other tool seems to be available to examine the other aspects of privacy proposed by different authors

Considering the gaps in information mentioned above on privacy and some of its correlates, the present research had the following objectives
1) Examining the possible relationship between a philosophical view pertaining to the environment, namely, the People-Environment Relationship view (Stokols, 1990), and privacy preference,

2) Examining the relationship between specific situational variables (the number of persons and the presence or absence of a partition) and seating preference/ seat placement as indicators of privacy preference,

3) Examining the relationship between specific psychological variables (sense of control over privacy, and the discrepancy between desired and actual privacy) and privacy preference

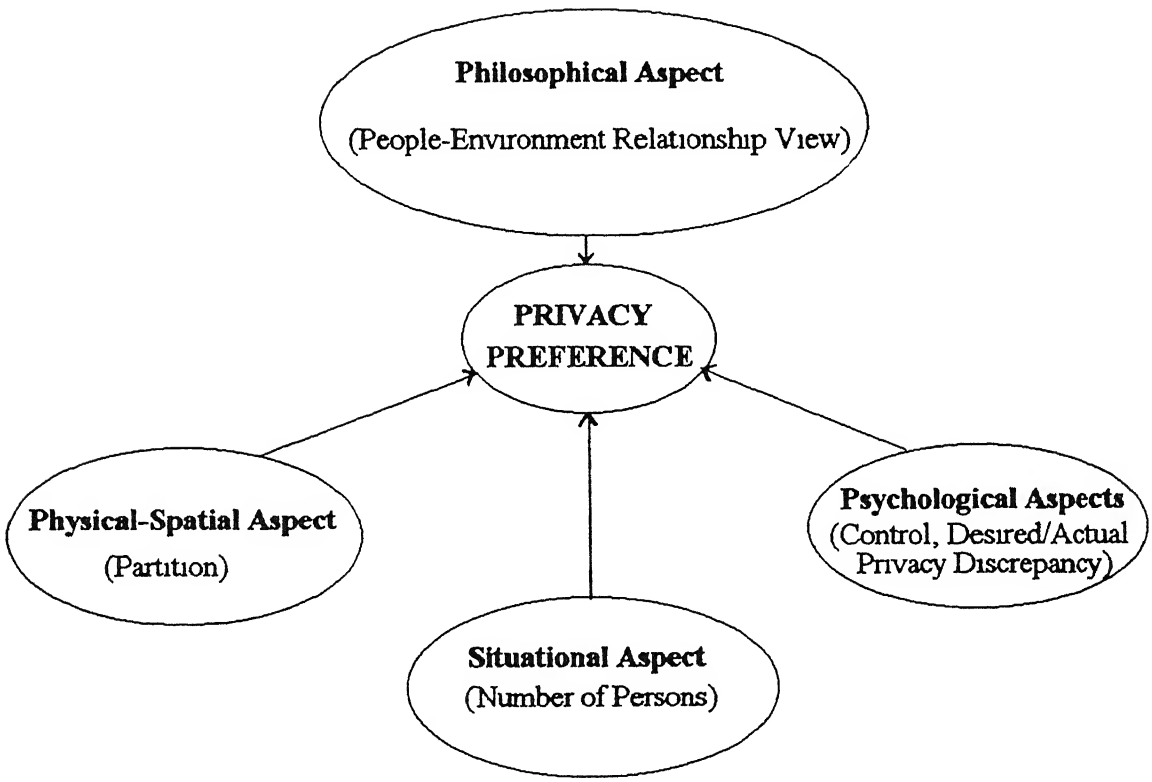
It was felt that examining the variables mentioned above would contribute information regarding (i) the cross-cultural generality of certain conceptualizations of privacy (for example, Westin's four dimensions, and Altman's control/regulation approach), and (ii) a possible philsophical base of privacy preference (for example, with reference to the view of People-Environment Relationship) thereby enriching the existing conceptualization of privacy. The present research was also expected to contribute to method, by providing some tools for the measurement of privacy Most of the tools followed the conventional psychometric bases, others were based on ideas proposed in some of the earlier conceptualizations of privacy

In the proposed research, privacy preference will be considered as the major dependent variable This will be measured mainly with the help of inventories, but other measures such as seating preference and seat placement will also be examined

The independent variables will include those mentioned above in the context of the objectives of the present research

Figure 1 summarizes the general scheme of the present research The details of the different studies will be described

Figure 1 A Scheme for the Empirical Study of Privacy Preference and its Correlates



at the appropriate places

Plan of Research

The four aspects of the present research described above will be examined in three different studies, as mentioned below·

Study 1 Privacy Preference and People-Environment Relationship (PER) A Correlational Study

Study 2 A. The Effect of Partitions and Number of Persons on Seating Preference as an Indicator of Privacy Preference An Experimental Study

B The Effect of the Number of Persons on Seat Placement as an Indicator of Privacy Preference: An Experimental Study

Study 3 Privacy Preference and Regulation, the Sense of Control over Privacy, and Discrepancy in Desired/Actual Privacy. A Correlational Study

Study 1 has been described in Chapter 2A, Study 2a and 2B in Chapter 3, and Study 3, in Chapter 4 Finally, the overall conclusions, summary, and implications of the present research have been described in Chapter 5

Chapter 2

Privacy Preference and People-Environment Relationship View: A Correlational Study (Study 1)

As indicated in the general rationale for the present research (described in the first chapter), one of the unexplored issues in the area of privacy is that of a possible relationship between privacy preference, on one hand, and the view of the person-environment relationship prevalent in a culture, on the other The present chapter describes a correlational study that was undertaken in order to examine the possible relationship between the two variables in an Indian sample

The specific rationale underlying this study was as follows There seems to be no empirical investigation of privacy and its correlates in the context of the Indian culture Therefore, as a first step, it would be necessary to examine what the concept of privacy means to Indians Moreover, as was pointed out in the previous chapter, the existing literature on privacy deals with demographic, personality, and physical-spatial determinants of privacy preference but does not include a study of the philosophical aspects of privacy, such as the role of the view of the person-environment relationship If such a relationship is found, this may enrich the understanding of the concept of privacy Again, in the Indian context, there is no direct empirical information on the view of the person-environment relationship, and this needs to be examined There are indications (in religious practices and preachings, folklore and traditions) that the person-environment relationship plays an important role in the Indian culture In other words,

considering the total lack of information on privacy, systematically gathered evidence on the view of the person-environment relationship, and the role of the latter in determining privacy preference, Study 1 sought to answer the following questions:

1 How do Indian subjects (as members of a non-Western culture) define the concept of privacy ?

2 What are the various components of privacy in the Indian context ? Are they the same as those proposed by some Western researchers (for example, Westin, 1967) ? If not, what are the differences ?

3 With respect to the philosophical aspect of privacy, how do Indian subjects view the People-Environment Relationship (PER), a view proposed by Stokols (1990) ? Does the Indian view incorporate the same aspects that Stokols proposed ? If not, what are the differences ?

4 What is the nature of the relationship (if any) between privacy preference, on one hand, and PER view, on the other ? How can this relationship be explained ? What are its implications for understanding privacy preference ?

An attempt was made to answer these questions empirically In order to put the present discussion in its proper perspective, it would be helpful to begin with a description of the theoretical basis of the major questions

Privacy and its Dimensions

As discussed in Chapter 1 there are several ways of conceptualizing privacy One view that presents a clear set of

limensions or components is that by Westin (1967). In this view, four dimensions have been proposed, namely, Solitude, Intimacy, Reserve and Anonymity. Briefly described, Solitude means that a person wishes to be physically alone, away from others Intimacy means that the person wishes to interact with a selective few, and maintain small-group privacy Reserve implies that even when others are present the person actively avoids interacting with them In the case of Anonymity, although others are present, the person maintains privacy by not revealing his/her personal identity Although Westin himself did not devise any specific tool for the measurement of these dimensions of privacy, some other researchers have devised inventories for this purpose (Marshall, 1972, Pedersen, 1979, Rustemli & Kokdemir, 1993) However, at the time of commencement of the present research (in early 1993), these inventories were not available to the present author In view of the lack of any standardized inventory the present author constructed an inventory for assessing (a) what privacy means, (b) the different components of privacy (on the same pattern as that described by Westin), (c) how often these forms of privacy are experienced, (d) to what extent each of the forms of privacy is preferred, and (e) what means are adopted when privacy is violated It should be clarified at the outset that constructing tools was not the major aim of the study, rather, it was necessary in order to conduct the study

To begin the task of devising the inventory, it was felt that respondents should be given an opportunity to express, in an open-ended way, what the concept of privacy meant to them Following that, descriptions of some hypothetical situations

depicting the four forms of privacy (namely, Solitude, Intimacy, Reserve and Anonymity) would be presented to the respondents They would be required to indicate how often they had experienced those forms of privacy (familiarity), how much they would like that kind of situation (liking), and how often they adopted means to achieve or maintain the respective forms of privacy (frequency) It was proposed that the responses would be subjected to suitable statistical analysis (specifically, factor analysis) An inference would then be made with regard to the components (factors) of privacy that would emerge, and it would be seen to what extent these components resemble, or differ from, the components proposed by Westin Details of the inventory are given later in the present chapter.

People-Environment Relationship (PER) View: A Philosophical Aspect

Because this aspect has not received much attention in the literature, some detailed discussion is required in the present context The philosophical aspect of privacy is based on the premise that privacy, like some other forms of behaviour, is a response to the physical as well as social environment Such an idea has been expressed in some conceptualizations of privacy such as Archea's (1977) view which highlights the physical-environmental and communication aspects Earlier concepts that pertain to environmental cognition, such as affordance (Gibson, 1966), competence and effectance (White, 1959, in Proshansky, Ittelson & Rivlin, 1970), along with the concept of control and regulation as part of privacy (Altman, 1975), suggest that an

individual perceives the environment not merely as consisting of physical units and/or social entities, but also as conveying specific meanings, in a more abstract sense. From that point of view, the way in which an individual views the environment might influence his/her view or concept of privacy, and also privacy preference It is also possible that the availability of privacy influences the way in which an individual defines it, the degree to which he/she prefers it, and also the person-environment relationship view In other words, the relationship between the two, namely, the privacy concept and preference, and person-environment relationship view, could be bilateral Alternatively, the two constructs could be unrelated, and function in a parallel rather than interactive way The latter seems to be the view tacitly adopted in contemporary research on privacy Keeping this background in mind, in the present study, the relationship between the PER view and privacy preference was examined

In this context, a brief description of three major philosophical views pertaining to the person-environment relationship is given below

The first is a set of world views proposed by Altman & Rogoff (1987), which broadly represent the kind of approaches taken in the study of environmental psychology, but which can be considered also in the specific context of person-environment relationships Four approaches to psychological analysis are described in this view, namely,

a) the trait approach, in which behaviour with respect to the

environment is investigated in the form of objectively measurable units independently of other variables The focus in this approach is the person;

b) the interactional approach which focuses on the combined effects of personal and environmental variables on behaviour In this approach also, behaviour is studied in terms of objectively measurable units,

c) the organismic approach, which views the person-environment relationship as a whole, while acknowledging personal and environmental variables as parts of the whole In this approach, global concepts such as the "ecosystem" become major independent variables;

d) the transactional approach, which takes the position that the determinants of behaviour with respect to the environment can never be studied as separate units, instead, it assumes that the so-called 'parts' are built into the whole. Thus every effect is a part of the cause, and every cause is a part of the effect, and the two co-exist in a dynamic relationship

The second view of the person-environment relationship is that proposed by Stokols (1990), which is labelled the People-Environment Relationship (PER) view According to this conceptualization, the relationship of the individual to the environment may be seen in three different views, namely, the minimalist, instrumental and spiritual views The minimalist view states that the physical environment has a negligible influence on human beings In fact, often , giving importance to the environment may be detrimental to efficiency and to human growth The instrumental view suggests that the physical

environment is to be used as a means for achieving behavioural and economic goals Any environment is assessed in terms of its capacity to provide resources, comfort, safety, and overall economic well-being In other words, this view assumes that the environment exists mainly for the service of people The spiritual view states that the environment exists, not for use by people, but as a medium for human values to grow and evolve The environment is not a means to a human end, but an end in itself Therefore, the environment must be perceived and understood, not in material terms, but in sociocultural, spiritual or religious terms Such aspects are reflected in the symbolic and spiritual dimensions of the environment

The third view related to the environment is that of environmentalist values, proposed by Merchant (1992, in Stern & Dietz, 1994) and Stern and Dietz (1994) In this approach attitudes and behaviour towards the environment are discussed in the light of certain values which are said to form the basis of environmental ethics These are, in Merchant's view, a) egocentric values, which emphasize the maximization of self-interest by the individual, b) homocentric values which emphasize "the greatest good for the greatest number of people", and c) ecocentric values which emphasize the "unity, stability, diversity, and harmony" of the ecosystem

Stern and Dietz (1994) describe three very similar values, namely, egoistic, altruistic and biospheric Egoistic values correspond to Merchant's egocentric values Altruistic values are based on the moral sense of obligation to others, and imply that

people should work for the welfare of others rather than for oneself. Thus one should bear in mind the consequences of one's actions for others. These values seem similar to Merchant's altruistic values. Biospheric values are similar to Merchant's ecocentric values. They assume that all components of nature, including human beings, are a part of the biosphere or ecosystem Therefore human actions would affect the biosphere as a whole Of the three views discussed above, Stokols' (1990) view of PER seems to be most relevant to the understanding of concepts such as privacy, although even that relevance may not be immediately clear There is also some overlap between the views For example, egocentric or egoistic environmentalist values seem to have something in common with Stokols' instrumental view of PER Similarly, ecocentric or biospheric environmentalist values would possibly be associated with a spiritual view of the People-Environment Relationship, the latter may also include homocentric or altruistic values. With respect to Altman and Rogoff's world-view approaches, it appears that the spiritual view of PER necessitates an organismic as well as transactional approach to the analysis of person-environment relationships

The question is. in what way would these views be relevant to the concept of privacy ? In response to this query, it was felt that Stokols' view is the most relevant If the minimalist view is strong, then the environment (including the social environment) would be given no importance In order to emphasize the personal growth of an individual solitude as a form of privacy would probably be considered the most important If the instrumental view of PER predominates, then people as part of the

environment would be perceived in an instrumental way, that is, social interaction would be engaged in with a purpose or goal, intimacy would probably be the most preferred form of privacy If the spiritual view emerges as the strongest component of the PER view, then the person-environment relationship may be seen as symbiotic and interactive, or the person may be seen as an inseparable part of nature (environment), there may be no specific preference for any form of privacy Because the spiritual view implies a kind of contemplation, which is possible only in a situation of solitude, one may expect the spiritual view to be associated with solitude.

What has been said above is somewhat speculative, and needs to be examined empirically If such relationships between privacy components and PER components are eventually found, this may enrich the existing conceptualization and understanding of privacy, which, in contemporary thinking, considers the individual as separate from the global environment

Moreover, this PER-privacy relationship was considered research-worthy mainly because certain characteristics of the Indian cultural context suggest the possibility of a significant privacy-PER view relationship

First, Indian philosophical thought sees the individual as a part of the extended environment It acknowledges the fact that the environment (nature) is the source of all life and the provider of resources, therefore it is not to be exploited or misused In fact, nature is a manifestation of the divine, like the human being Therefore, worshipping the natural environment

is not merely a display of paganism, but an expression of gratitude and the acceptance of human dependence on nature These attitudes are exhibited rather clearly in ancient Indian texts, religious practices, and in tribal and rural Indian life Sen (1992) presents superb accounts of these aspects in her description of "indigenous visions" of the environment. Secondly, there are some excellent examples of attempts to establish closeness with nature in human life Shanti Niketan, an educational institution in West Bengal, India, was founded by the Nobel Laureate and Indian poet, Rabindranath Tagore, with the aim of imparting education in the midst of nature Focusing on Tagore's vision of ecological harmony, Ray (1990) writes " the philosophy of education professed by Tagore has incorporated the idea that the role of nature is as much essential to the possibility of education proper as any other aspect" (p 303) Thus the core Indian culture inculcates a PER view that suggests an essential harmony between the person and the natural environment, including other people Because nature is seen as a manifestation of divine powers, such a PER view encourages a contemplative and spiritual attitude among people Contemplation requires that the individual spend time with himself/herself, away from social interaction This would make solitude the most preferred form of privacy (and to some extent, reserve and anonymity)

At the same time, societal characteristics encourage an affiliative and community orientation (as seen in the rich Indian folk tradition) This encourages intimacy as a form of privacy

Parallel to these core cultural attitudes, economic necessity makes the Indian people instrumental in their attitude towards natural resources, as is the case in other cultures In addition, this may give rise to a symbiotic view of PER. that is, people and nature are meant for each other. All of these possibilities taken together may give rise to a paradoxical PER view On one hand, a spiritual view of PER is fostered that goes against an instrumental or exploitative view of the environment On the other, necessity encourages an instrumental view. Which of these PER views predominates, which form of privacy would be preferred most, and in what way the two would be related remains to be empirically examined.

The present study was conducted in the background of the privacy conceptualization and PER view discussed above. In the absence of both empirical information and tools for the measurement of the two variables, the first step in the study was to devise appropriate tools (inventories) for the measurement of both Privacy Preference and PER view, to see exactly what components of the two variables are found among Indian subjects, and then to examine the nature of the relationship (if any) between the two At this stage, the broad expectations were that (1) privacy would consist of components similar to Westin's (1967) four dimensions, namely, Solitude, Intimacy, Reserve and Anonymity, the rationale being Altman's (1975) suggestion that privacy has a culturally universal base, (2) the PER view would consist of a stronger spiritual component along with less dominant symbiotic and instrumental components this expectation was based on the Indian cultural characteristics described above,

(3) overall, the spiritual component would be related to a preference for the Solitude component of privacy, and to a smaller extent, Reserve and Anonymity, the instrumental and symbiotic PER views would be related to a preference for Intimacy The present study was exploratory, and there was a possibility that the components of both privacy and PER view would be different from Westin's and Stokols' components, respectively

Method

Subjects

Eighty urban respondents (40 males and 40 females) and 70 rural respondents (30 males and 40 females) participated in the study The urban sample was taken from an industrial city in Northern India, and the rural sample was taken from villages in the vicinity The age of the urban male respondents was between 25 and 53 years (Mean age = 39 5 years, SD = 8 61), and that of the urban female respondents, between 25 and 45 years (Mean age = 33 15 years, SD = 7 05) The age of the rural male respondents was between 23 and 53 years (Mean age = 40 13 years, SD = 7 97), and that of the rural females, between 24 and 46 years (Mean age = 33 47 years, SD = 7 28)

Procedure

All respondents were interviewed at their residence The interview schedule consisted of two inventories (the Privacy inventory and the PER view inventory) specifically devised for the purpose of the study The details of the inventories and their construction are presented below. All interviews were

conducted in Hindi, the native tongue of the respondents

Tools

The interview schedule consisted of a) the PER view inventory, followed by b) the Privacy inventory. The inventory (in both the English and Hindi versions) is presented in Appendix 1A and 1B

In view of the theoretical ideas discussed above, Stokols' (1990) conceptualization of the PER view, and Westin's (1967) dimensions of privacy were used as the base for the construction of the two inventories In the case of the PER view inventory, in addition to the minimalist, instrumental and spiritual views, a fourth component, namely, symbiosis, was included Statements were selected to represent each of these components (three items in each component, with a total of 12 items to measure the four PER view components) Respondents were asked to indicate the extent of their agreement or disagreement with each statement on a 7-point Likert-type scale (1 indicating Strong Disagreement, 7 indicating Strong Agreement) In addition to the PER statements, two other items were added in order to obtain information about respondents' view of the environment The final PER view inventory thus consisted of the following items

1) a question pertaining to the meaning of the environment (open-ended),

2) the extent to which the environment was considered important (to be rated on a 7-point scale, 1 indicating 'Not at all important', and 7 indicating 'Very important'), and reasons for the same (open-ended)

3) Twelve statements pertaining to the four PER components (described above): the respondent had to rate the agreement/disagreement with each statement (on a 7-point scale, as indicated above)

For the purpose of factor analysis, the ratings given in response to the 12 items related to the four PER components were considered.

In the case of the Privacy inventory, a combination of different kinds of items was presented The first item was an open-ended question pertaining to the meaning of the word 'privacy' It may be noted that there is no separate word in Hindi to denote 'privacy', therefore, the word was used in its original English form for those who could understand its meaning In the case of the respondents who could not, the question had to be omitted The first item was followed by items depicting privacy Short descriptions of hypothetical real-life situations depicting Solitude, Intimacy, Reserve and Anonymity were presented Each description, in turn, was followed by the following four questions a) the frequency of experiencing the situation, which had to be answered on a 7-point scale ranging from 1 (Never) to 7 (Always),

b) liking (preference) for the situation, which had to be answered on a 7-point scale ranging from 1(Dislike very much) to 7 (Like very much),

c) the means adopted (that is, what is done) in order to obtain the kind of privacy depicted in the situation, which was an open-ended question,

d) frequency of adopting the means mentioned in c), which also had to be answered on a 7-point scale ranging from 1 (Never) to 7 (Very frequently)

Following the hypothetical situations and the questions pertaining to them, four items were presented, each depicting a form of privacy, and the respondent was required to indicate the preference (extent of liking or dislike) for that kind of privacy The purpose of these 4 items was to check the consistency of responses given in the previous items

For the purpose of factor analysis, the responses to the second question (extent of liking, or preference) and fourth item (frequency of adopting means to maintain privacy) were considered in the case of the privacy components

Results

The very first step in the analysis of the interview responses was to compare males and females, and the urban and rural samples As indicated by the means and standard deviations presented in Tables 1 and 2, overall, there were some significant gender differences with respect to certain items on both the PER view and Privacy inventories. However, a closer inspection of these differences revealed that they were not of such a magnitude that one could argue for real gender differences in the two variables In the interests of sample size and generalization of the findings, the remaining analysis was carried out on the combined sample of males and females

With respect to the urban/rural samples, some differences were obtained In general, the item means did not differ

Table 1

Mean and Standard Deviations of PER Inventory Items (Study 1)

(Urban N=80,40 Males, 40 Females, Rural N=70,30 Males, 40 Females)

Item		Males MEAN	Males SD	Females MEAN	Females SD	Male/Female COMPARISON 't'
1 PER 1 (Minimalist)	URBAN	2 22	0 89	1 47	0 50	4 63 P< 01
	RURAL	2 03	0 55	1 95	0 74	0 51 NS
2 PER 2 (Minimalist)	URBAN	2 30	0 51	1 82	0 59	3 82 P< 01
	RURAL	2 53	0 57	2 07	0 73	2 85 P< 01
3 PER 3 (Minimalist)	URBAN	3 40	0 84	2 50	1 28	3 71 P< 01
	RURAL	3 66	0 54	2 50	1 17	5 03 P< 01
4 PER 4 (Instrumental)	URBAN	6 15	0 36	6 40	0 77	-1.84 NS
	RURAL	6 10	0 48	6 30	0 79	-1.22 NS
5 PER 5 (Instrumental)	URBAN	3 87	0 79	2 57	1 59	4.61 P< 01
	RURAL	3 66	0 75	2 62	1 48	3.52 P< 01
6 PER 6 (Instrumental)	URBAN	5 80	1 56	6 17	1 40	-1 12 NS
	RURAL	5 76	0 50	6 12	0 68	-2 41 P< 05
7 PER 7 (Spiritual)	URBAN	4 27	0 71	5 40	1 39	-4 55 P< 01
	RURAL	4 53	0 97	5 32	1 22	-2.91 P< 01
8 PER 8 (Spiritual)	URBAN	4 47	1 06	5 12	1 18	-2 59 P< 05
	RURAL	4 86	0 86	5 27	1 67	-1.67 NS
9 PER 9 (Spiritual)	URBAN	4 82	0 90	4 72	1 71	0 33 NS
	RURAL	4 76	0 81	4 70	1 69	0 20 NS
10 PER 10 (Symbiotic)	URBAN	5 65	0.48	5 70	1 06	-0 27 NS
	RURAL	5 86	0 57	5 75	1 08	0 54 NS
11 PER 11 (Symbiotic)	URBAN	3 60	0 77	4 10	1 54	-1 82 NS
	RURAL	3 96	0 80	4 20	1 47	-0 78 NS
12 PER 12 (Symbiotic)	URBAN	4.30	1 26	4 27	1 94	0 07 NS
	RURAL	3 93	0 94	4 32	1.94	-1 02 NS

Table 2

Mean and Standard Deviations of Privacy Inventory Items (Study 1)

(Urban N=80, 40 Males, 40 Females, Rural N=70, 30 Males, 40 Females)

Item		Males MEAN	Males SD	Females MEAN	Females SD	Male/Female COMPARISON 't'	
1 Solitude 1 (Familiarity)	URBAN	3 30	1 14	2 87	1 50	1 44	NS
	RURAL	4 10	0 75	3 55	0 95	2 59	P< 05
2 Solitude 2 (Liking)	URBAN	3 42	1 17	2 95	2 23	1 19	NS
	RURAL	4 23	0 77	3 95	1 06	1 24	NS
3 Solitude 4 (Frequency)	URBAN	3 30	0 96	2 10	1 53	4 19	P< 01
	RURAL	3 20	0 48	3 40	0 70	-1 33	NS
4 Intimacy 1 (Familiarity)	URBAN	5 45	0 63	4 97	0 97	2 58	P< 05
	RURAL	5 33	0 71	4 92	0 85	2 12	P< 05
5. Intimacy 2 (Liking)	URBAN	5 60	0 54	5 60	0 90	0 00	NS
	RURAL	5 56	0 50	5 17	0 90	2 14	P< 05
6. Intimacy 4 (Frequency)	URBAN	4 00	0 45	3 52	0 99	2 77	P< 01
	RURAL	3 96	0 55	3 82	0 74	0 87	NS
7 Anonymity 1 (Familiarity)	URBAN	1 92	0 92	2 22	1 29	-1 20	NS
	RURAL	1 00	0 00	1.00	0 00	0 00	NS
8 Anonymity 2 (Liking)	URBAN	1 60	1 46	2 30	2 45	-1.55	NS
	RURAL	-	-	-	-	-	
9. Anonymity 4 (Frequency)	URBAN	1 47	1.37	1 45	1 53	0 08	NS
	RURAL	-	-	-	-	-	
10 Reserve 1 (Familiarity)	URBAN	2 47	0 90	2 32	1.27	0 61	NS
	RURAL	1 00	0 00	1.00	0.00	0 00	NS
11 Reserve 2 (Liking)	URBAN	2 75	1 40	2.17	1 88	1.53	NS
	RURAL	-	-	-	-	-	
12 Reserve 4 (Frequency)	URBAN	2 67	1 33	2.05	1 79	1 77	NS
	RURAL	-	-	-	-	-	
13 Solitude Preference	URBAN	3 50	1 06	3 42	1.79	0 23	NS
	RURAL	4 03	0 80	3.85	0.80	0 94	NS
14. Intimacy Preference	URBAN	5 42	0.50	5.82	1.01	-2.24	P<.05
	RURAL	5 63	0 49	5.90	0.70	-1.77	NS
15. Anonymity Preference	URBAN	1.95	0 98	2.52	1.85	-1 73	NS
	RURAL	1.00	0 00	1.00	0.00	0 00	NS
16 Reserve Preference	URBAN	2.80	1 11	2.55	1.35	0 90	NS
	RURAL	1.00	0 00	1.00	0.00	0.00	NS

significantly between the two samples, however, some of the items in the case of the Privacy inventory, namely, those related to Reserve and Anonymity, did not elicit any response from the rural subjects, because of a lack of familiarity with these ideas This was evident in the response given to the 'familiarity' item in the interview itself. Among the urban subjects, 82 5% expressed familiarity with situations of Solitude, 100%, with Intimacy, 55%, with Anonymity and 72 5%, with Reserve. The rural subjects, on the other hand, indicated 100% familiarity with Solitude and Intimacy, but total unfamiliarity (0% familiarity) with both Anonymity and Reserve Considering this situation, it was decided that the factor analysis would include only the urban sample in the case of both the PER view and Privacy variables Wherever possible, responses of the rural sample would be included for the purpose of comparison with the urban sample

Depending on the nature of the item, responses were analyzed (i) by comparing means, (ii) in terms of frequencies of certain categories of responses (in the case of open-ended items), (iii) with the help of factor analysis (in the case of the main PER and Privacy items), and (v) with the help of multiple regression, in order to examine the PER view - Privacy preference relationship

The major findings are described below

I. PER view Inventory

1 <u>The meaning of 'environment'</u> Among both urban and rural respondents, the responses given to this item could be classified into (a) geographical and natural aspects, such as trees and

plants, rivers, mountains and so on (Urban = 100%, Rural = 100%), (b) man-environment aspects (indicating that the human being is a part of the environment) (Urban = 18.75%, Rural = 12 86%), (c) man-made objects, such as buildings, factories and the like (Urban = 18 75%, Rural = 24 28%). In other words, respondents perceived the environment mainly in physical terms, with a predominance of natural components

2 Importance of the environment The mean rating of importance of the environment indicated that in general, the environment was considered highly important (Urban, Mean rating = 6 17, SD = 0 49, Rural, Mean rating = 6 17, SD = 0.56, on a 7-point rating scale) Among the reasons for considering the environment important, all respondents mentioned that the environment was necessary for their existence, and for the fulfilment of needs, indicating a utilitarian or instrumental attitude

3 Components of PER view Factor analysis (varimax rotation) of the responses to the main PER items was carried out in the case of the urban sample This yielded four major factors which were labelled as follows Utilitarian Attitude, Interactiveness/ Symbiosis, Negative Orientation, and Spiritualism The factor loadings of the constituent items of the four factors are presented in Table 3 The first factor, namely, Utilitarian Attitude, included 1 item of the original minimalist component (negatively loaded), 2 items of the original instrumental component, and 1 item of the original symbiosis component The second factor, namely, Interactiveness/Symbiosis, consisted of 1 item of the original minimalist component (negatively loaded), 2 items of the original spiritualism component, and 2 items of the

Table 3*

PER View: Factors and their Loadings (Study 1)
[Urban Sample N=80]

PER FACTOR 1 Utilitarian Attitude		PER FACTOR 2 Interactiveness/ Symbiosis	
Items	Loadings	Items	Loadings
PER 3	-0.45669	PER 3	-0.44510
PER 4	0.84588	PER 7	0.55249
PER 6	0.79026	PER 8	0.52268
PER 10	0.77013	PER 11	0.62899
		PER 12	0.86567

PER FACTOR 3 . Negative Orientation		PER FACTOR 4 Spiritualism	
Items	Loadings	Items	Loadings
PER 1	0.77177	PER 2	-0.73111
PER 2	0.40567	PER 8	0.64521
PER 5	0.71936	PER 9	0.54428
PER 7	-0.47051		

* Only those items were included in the factor structure which had at least a loading of 0.40.

original symbiosis component. The third factor, namely, Negative Orientation, included 2 items of the original minimalist component, 1 item of the original instrumental component, and 1 item of the original spiritualism component (negatively loaded) The fourth factor, namely, Spiritualism, consisted of 1 item of the original minimalist view (negatively loaded), and 2 items of the original spiritualism component.

It may be noted that the PER view factors obtained in the present study were similar, but not identical, to those proposed by Stokols (1990)

With respect to the urban sample, in order to answer the question regarding the predominant component of PER view, the means of the ratings with respect to each factor were compared It was observed that the mean rating was highest in the case of PER Factor 1, Utilitarian Attitude (Mean = 5 22, SD = 0 40) and PER Factor 4, Spiritualism (Mean = 5.17, SD = 0 69), followed by PER Factor 2, Interactiveness/ Symbiosis (Mean = 4.56, SD = 0 92), it was lowest in the case of PER Factor 3, Negative Orientation (Mean = 2 99, SD = 0 46)

The responses to the PER Inventory given by the rural respondents were more variable, some of the responses also reflected a lack of comprehension of the items Therefore, these responses were not subjected to factor analysis Instead, the inter-item correlations (zero-order) were computed in order to see if the items were conceptually inter-related The inter-item correlations of the PER inventory in the case of the rural sample are presented in Table 4 An examination of the table shows that

Table 4

Inter-Item Correlations between PER Inventory Items (Study 1)
(Rural Sample N=70)

	1	2	3	4	5	6	7	8	9	10	11	12
1.PER1	-											
2.PER2	-.02	-										
3.PER3	27*	.18	-									
4.PER4	- 12	- 15	-.40**	-								
5 PER5	18	10	29**	-.08	-							
6.PER6	-.10	- 18	- 33**	28**	- 24*	-						
7.PER7	-.18	-.20	-.48**	.29**	-.35**	.46**	-					
8.PER8	-.23*	- 08	- 49**	.34**	- 24*	.29**	.45**	-				
9.PER9	.20	- 15	.18	- 08	18	- 24*	- 14	-.01	-			
10.PER10	.02	-.05	-.22	36**	.15	22	12	08	15	-		
11.PER11	-.12	-.15	-.37**	23*	- 10	.24*	33**	24*	- 12	24*	-	
12.PER12	- 12	-.12	-.50**	.25*	- 16	.30**	49**	39**	- 17	16	.43**	-

** P < 01
* P <.05

the inter-correlations did not reveal any systematic pattern of relationships between the items.

II. The Privacy Inventory

4. The meaning of privacy As was indicated earlier, 51 out 80 (63 75%) urban respondents were familiar with the English word 'privacy' However, the rural respondents, by and large, were unfamiliar with this word and could not respond to the question Therefore, only the responses of urban respondents to the item pertaining to the meaning of this word 'privacy' were considered These could be classified as (1) Solitude (39 21%) (2) No disturbance (41 17%), and (3) Choice or Freedom (21 56%) In other words, the word 'privacy' was interpreted most commonly as 'No disturbance' and 'Solitude', and least commonly in terms of 'Choice/freedom' The first two can be seen as being overlapping ideas

5. Components of Privacy Factor analysis (varimax rotation) of the responses given to the Privacy items (including the second and fourth questions related to the hypothetical situations of the Privacy inventory) was carried out in the case of the urban sample This yielded three major factors These were labelled Solitude/Intimacy, Reserve and Anonymity. Table 5 presents the factor loadings of the constituent items of the three factors The first factor, Solitude/Intimacy, included both the items of the original Solitude and Intimacy components The second factor, Reserve, included 2 items of the original Reserve component The third factor, Anonymity, consisted of the 2 items of the original Anonymity component Clearly, the Privacy factors

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Table 5*

Privacy : Factors and their Loadings (Study 1)
[Urban Sample N=80]

PRIVACY FACTOR 1 . Solitude/Intimacy

Items	Loadings
Solitude 2	.82525
Solitude 4	.85340
Intimacy 2	.61733
Intimacy 4	.44744

PRIVACY FACTOR 2 Reserve

Items	Loadings
Reserve 2	.93213
Reserve 4	.95395

PRIVACY FACTOR 3 : Anonymity

Items	Loadings
Anonymity 2	.95893
Anonymity 4	.91160

* Only those items were included in the factor structure which had at least a loading of 0.40.

which emerged in the present study were strikingly similar to the dimensions proposed by Westin (1967)

In order to examine which of the privacy components was preferred most and which one, least, the last set of 4 items (related to Westin's original dimensions) in the Privacy inventory were examined It was found that (in the urban sample) the mean preference rating was highest in the case of the Intimacy item (Mean preference rating = 5.62, SD= 0 82), followed by Solitude (Mean preference rating = 3.46, SD= 1 47) The lowest preference was for Anonymity (Mean preference rating = 2 24, SD=1 50) and for Reserve (Mean preference rating = 2 67, SD= 1 24) These preference ratings were compared with the factor means in order to see if there was a general correspondence between privacy preference and other aspects of privacy Inspection showed that the mean was highest in the case of Solitude/Intimacy (Mean = 3 81, SD= 0 89), followed by that of Reserve (Mean = 2 41, SD=1.58) and was lowest in the case of Anonymity (Mean = 1 70, SD = 1 66) It should be remembered that the factor means were based on one item related to preference, and another item related to frequency of adopting means in order to maintain privacy.

Further information about the consistency in responses to the Privacy factors was obtained by computing correlations between a) Privacy scores on each of the three factors (Solitude/Intimacy, Reserve, and Anonymity), on one hand, and b) the preference ratings on the last four (non-factor) items of the inventory, on the other These inter-correlations are shown in Table 6 It was observed that the relevant correlations were

Table 6

nter-item Correlations between Privacy Factors & Privacy Preference Item

(Study 1)

(Urban Sample N=80)

	1	2	3	4	5	6	7
Privacy Factor 1 Solitude/Intimacy	-						
Privacy Factor 2 Reserve	15	-					
. Privacy Factor 3 Anonymity	.28**	13	-				
. Preference for Solitude	.84**	11	48**	-			
Preference for Intimacy	.36**	- 17	.27**	35**	-		
Preference for Reserve	.19	.91**	.20	18	-.13	-	
. Preference for Anonymity	.28**	07	85**	55**	.28**	15	-

** P <.01

* P <.05

significant. In addition, the pattern of means in the case of the four (non-factor) preference items closely resembled that in the case of three factor means.

In the case of the rural respondents, no response was obtained to the Anonymity and Reserve items. Therefore, it was not possible to carry out a factor analysis of their responses to the Privacy Inventory Instead, some information regarding the conceptual relationship between the items was obtained by computing inter-item correlations (zero-order) as was done in the case of the PER Inventory The inter-item correlations of the Privacy Inventory in the case of the rural sample are presented in Table 7 The table omits all Anonymity and Reserve items (for the reason mentioned above) Once again, no systematic pattern of inter-item relationships emerged in the case of rural respondents

III. Relationship between PER view and Privacy

The PER view factor scores (consisting of the total of ratings over all the constituent items of each factor) and the Privacy factor scores (calculated in a similar way) were subjected to a stepwise regression analysis, considering Privacy factors as the dependent variables, and the PER view factors as the independent variables The results of the analysis are presented in Table 8 The analysis revealed that (1) three of the four PER view factors, namely, Interactiveness/Symbiosis, Negative Orientation, and Spiritualism, were significant predictors of all three Privacy factors PER Factor 1, Utilitarian Attitude, did not significantly predict any of the

Table 7

Inter-item Correlations between Privacy Inventory Items (Study 1).
(Rural Sample N=70)

	1	2	3	4	5	6	7	8
1. SOLITUDE 1 (Familiarity)	-							
2. SOLITUDE 2 (Liking)	.43**	-						
3. SOLITUDE 4 (Frequency)	-.03	20	-					
4. INTIMACY 1 (Familiarity)	.05	06	- 03	-				
5. INTIMACY 2 (Liking)	-.08	.08	- 07	- 03	-			
6 INTIMACY 4 (Frequency)	29**	- 03	15	.23*	-.12	-		
7 Preference for Solitude	.39**	38**	-.13	.05	22	-.12	-	
8. Preference for Intimacy	.14	.38**	- 08	.15	09	.04	.20	-

** p < 01 * p < 05

Table 8

PER Factors & Privacy Factors Multiple Regression Analysis Results
(Urban Sample N=80)

Independent Variables (4) PER View Factors
Dependent Variables (3) Privacy Factors

Equation 1	Dependent Variable		Solitude/Intimacy		
Step	MultiR	Rsq	F(Eqn)	Sig	Beta	Variables
1	30	09	7 83 df(1,78)	00	- 30	Interactiveness/ Symbiosis
2.	48	23	11 61 df(2,77)	00	41	Spiritualism

Equation 2	Dependent Variable		Reserve		
Step	MultiR	Rsq	F(Eqn)	Sig	Beta	Variables
1	29	08	7 15 df(1,78)	00	- 29	Interactiveness/ Symbiosis

Equation 3	Dependent Variable		Anonymity		
Step	MultiR	Rsq	F(Eqn)	Sig	Beta	Variables
1	32	10	8 99 df(1,78)	00	32	Spiritualism
2	40	16	7 25 df(2,77)	00	- 24	Negative Orientation

component involving Solitude and Intimacy, a Reserve component, and an Anonymity component. The most preferred component was Solitude/Intimacy and the least preferred was Anonymity. It is interesting to note that Solitude and Intimacy were familiar privacy components, but Reserve and Anonymity were much less familiar and also less preferred forms of privacy. This could mean that in Indian thinking, once a person is in the midst of people, some kind of interaction is considered desirable, rather than the total absence of any interaction, or impersonal interaction These observations are quite consistent with the core cultural characteristics of India which, on one hand, encourage solitude to make people contemplative, and on the other, also value limited or small-group privacy in the form of intimacy, as is evident in strong community ties The latter is in accordance with cultural collectivism (Hofstede, 1980) The fact that these privacy components are similar to Westin's supports Altman's (1975) suggestion that privacy has a culturally universal dimension However, the extent to which the same dimensions would be preferred in Western cultures is not known

It should be pointed out that control or choice as a major component of privacy (Altman, 1975) did not appear strongly among the present subjects. Responses to the open-ended question pertaining to the meaning of privacy, indicated that among urban respondents, choice or freedom was the least commonly mentioned meaning of privacy In other words, although there is some support for Altman's contention of the cultural universality of privacy, the component of control or choice does not appear to be

a particularly strong component of privacy in the present sample.

With regard to the PER view also, the findings indicated components very similar to those proposed by Stokols (1990) Utilitarian Attitude is reminiscent of an instrumental view, and Spiritualism is the equivalent of the spiritual view. Negative Orientation, which implies an active negation of a PER, may resemble the minimalist view but has a negative rather than neutral implication There is no equivalent component for Negative Orientation in Stokols' view The constituent items of Negative Orientation showed the expected pattern of negative loadings Similarly, the Interactiveness/Symbiosis factor also does not appear directly in Stokols' view, but this could possibly be part of what Stokols called the spiritual view. This factor provides further evidence of the harmonious man-nature relationship which is fostered by Indian philosophical thought

An apparently anomalous finding was that both the Utilitarian Attitude and Spiritualism components received the greatest degree of endorsement, although the two signify opposite philosophies with respect to PER This may be explained on the basis of the co-existence of a traditional philosophy that accounts for a spiritual view of PER, along with economic necessity which makes subsistence dependent on the natural environment and thereby makes Indians sensitive to its instrumental and utilitarian aspects Additional indications of a utilitarian attitude were obtained in the reasons mentioned by the respondents for considering the environment important, all of them stated that the environment is important because it provides resources Tempered by a Spiritual view of the person-environment

relationship, such a Utilitarian Attitude may not imply an overall negative PER view. But it should be noted that although a predominant component of PER view, Utilitarian Attitude was the only factor that was not significantly related to any of the Privacy factors. This suggests that a predominant utilitarian or instrumental view of PER among Indians does not influence their privacy preferences In other words, the findings with regard to the PER views obtained in the present study were not entirely contrary to those expected on the basis of specific Indian cultural characteristics

With regard to the relationship between the PER view and privacy preference, as expected, the two variables were found to be related in several ways It was expected that Spiritualism would be related to Solitude (and possibly to Reserve and Anonymity), whereas the instrumental (Utilitarian Attitude) and symbiotic (Interactiveness/Symbiosis) views would be related to Intimacy This was because a spiritual view would be expected to help a person turn 'inwards' rather than enjoy interacting with others On the other hand, an instrumental and symbiotic view would be expected to encourage limited interaction, but not total withdrawal from people. The actual results indicated that Spiritualism was, indeed, related to Solitude but also to Intimacy because the two were part of the same factor Moreover, Spiritualism was also related to Anonymity. The explanation could be, as suggested earlier, that a spiritual view discourages extensive social interaction This is easily achieved through the Anonymity form of privacy, without giving the impression that a

person dislikes interacting with others (as perhaps would be the case with Reserve) As mentioned above, Utilitarian Attitude was not related to either Intimacy or any other privacy factor In short, the PER view - Privacy relationships appear generally consistent with the core characteristics of the Indian culture, with the few exceptions discussed above

One major limitation of the present set of findings is that although statistically significant relationships were found, it is not clear what variables mediate the PER view - Privacy relationships, whether these relationships are due mainly to cultural characteristics, or due to other factors This aspect needs to be examined in future research Nevertheless, the present study does contribute by way of providing information on an aspect of privacy as well as the PER view that have remained untouched The present findings underline the need for investigating the role of the philosophical aspects of privacy In addition, the present study provided certain tools for the measurement of the two variables which would serve as a stepping stone for further work in this direction Other inventories may be devised using different kinds of items related to the PER view and privacy

Having obtained an answer related to a philosophical aspect of privacy, attention was turned to the next research question, pertaining to the effect of a physical-spatial and a situational variable on privacy preference

Chapter 3

Seating Preference and Seat Placement as Indicators of Privacy Preference: The Effect of Partitions and the Number of Persons: An Experimental Study (Study 2)

The first study in the present research examined the role of the People-Environment Relationship view as a philosophical aspect of privacy preference The second study, to be described in this chapter, attempted to investigate the effect of a physical-environmental variable, namely, the presence or absence of partitions, and a situational variable, namely, the number of persons, on privacy preference as indicated in seating preference and seat placement

The review of privacy literature presented in the first chapter included several investigations that showed the effect of spatial and architectural variables on personal space, crowding and privacy For example, the number of persons with respect to room size affects the sense of crowding (Baum & Davis, 1976) Sharing rooms, or living in cramped spaces, may influence the feeling of comfort or satisfaction, and the subsequent need for privacy (Marshall, 1972, Smith, 1982) Chairs and tables may be arranged sociopetally or sociofugally, so as to encourage or restrict social interaction and also the feeling of privacy (Osmond, 1957, Sommer, 1969). Enclosures such as partitions may enhance the sense of privacy and increase satisfaction at work to a greater extent than the absence of partitions, as in the case of open-plan offices (Oldham, 1988; Sundstrom, Herbert & Brown, 1982) Archea (1977) has highlighted the role of communication in privacy through spatial features, by controlling aspects such

as visual exposure and visual access; he points out that these aspects have and should be taken into consideration while planning the architecture of a place The history of architecture in both Western cultures and non-western cultures such as India contain indications of the fact that changes in architectural design over time have taken into account changing needs in social relationships, in addition to aesthetic, environmental and spatial, and sometimes, religious, considerations Zimring's (1982) classification of spaces into public spaces (such as parks and shopping malls), semipublic spaces (such as classrooms and apartment corridors), semiprivate spaces (such as VIP lounges and open-plan offices), and private spaces (such as private offices, bedrooms, and so on) further illustrates the significance of spatial and architectural variables in social interaction

Of the variables that have been mentioned above, two seem to be especially important in the context of spatial and architectural design as determinants of privacy preference These are, partitions, and the number of persons In the context of a culture such as India which faces the problem of perpetual space scarcity and large numbers of people, these variables take on a special significance

The present study was planned in order to answer the following question What would be the effect of a physical-spatial variable, namely, the presence of a partition, and a situational variable, mamely, the number of persons, on privacy preference as indicated through (1) seating preference, and (2) seat placement, in an office setting ?

The rationale for this study was that the following aspects related to the two variables remain somewhat ambiguous Considering seating preference and seat placement as indicators of privacy preference,

a) when there are fewer persons, the need for privacy (solitude) may not be strong because it is already available, therefore, there may be no special seating preference When a larger number of persons is present, a sense of crowding may increase the need for privacy, and accordingly lead to a preference for more isolated or 'private' seats,

b) in the presence of fewer persons, an individual may feel more 'watched' and have a stronger need for privacy, than in the presence of a larger number of persons who may induce a sense of anonymity, and therefore a reduced need for other forms of privacy In such situations, the presence of partitions might interact with the number of persons to affect privacy preference That is, the presence of partitions along with the number of persons may have either of the following effects. On one hand, partitions may bring about a greater feeling of privacy (solitude) in the presence of fewer persons because the individual feels more 'watched'; partitions may not increase the feeling of privacy in the presence of a larger number of persons because there is a sense of anonymity On the other hand, partitions may increase the sense of privacy (solitude) when the number of persons is large, but not when it is small, because in the latter case, privacy is already available

c) the question of social facilitation in performance in the

presence of others, needs to be considered. Research on social facilitation (Zajonc, 1965) shows that the presence of others, and being watched by them, improves the performance of familiar tasks (Schmitt, Gilovich, Goore & Joseph, 1986). How can these findings be reconciled with privacy needs which would predict the opposite effect ? Partitions provide privacy (solitude) by controlling visual access, but this may affect performance adversely

d) partitions also hinder intimacy (that is, exclusive interaction with others who are close to the individual) This may cause some social dissatisfaction which might be reflected in dissatisfaction at work This aspect becomes important in the Indian context because, in terms of privacy preference, Indians seem to prefer a combination of solitude and intimacy (as shown in Study 1)

In view of the questions related to (i) the effects of crowding and social facilitation mentioned above brought about by the presence of others, and (ii) the preference for a combination of both solitude and intimacy among Indian subjects, Study 2 sought to examine the effects of the two variables, namely, the presence of partitions and the number of persons, on privacy preference

Following the research of Sommer (1969) on seating preference as an indication of personal space, here also, seating preference was taken as an indicator of privacy An office setting was chosen For reasons that will be clarified later, two studies were conducted, the first one (Study 2A) examined the

effect of the two variables, along with the superior-subordinate hierarchy, on seating preference as the dependent measure The second study (Study 2B) included only the number of persons as an independent variable, and considered seat placement and choice of partitions as the dependent measures. The two studies are described below

Study 2A

This study examined the effect of the number of persons, seat position, and the presence or absence of a partition (between the superior and co-workers, and between the co-workers) on seating preference as an indicator of privacy preference

Method

Subjects

Forty male employees from 4 organizations participated in this study The age of the subjects ranged between 18 and 52 years (Mean age = 36 3 years, SD= 8.70)

Design

The independent variables, namely, Partition/ No partition between the superior and co-workers, Partition/No partition between the co-workers, and Seat Position were combined into a factorial design The number of persons considered were 3, 4, 5 and 6, according to which the number of seat positions also varied Partition/ No partition between the superior and co-workers was considered as a between-subjects variable Partition/ No partition between co-workers and Seat Position were considered as repeated measures. The effects of these three variables were compared across four Number of Persons conditions,

namely, 3, 4, 5 and 6 Persons. In other words, the design of the experiment was 2 x 2 x 3, 2 x 2 x 4, 2 x 2 x 5, or 2 x 2 x 6 design (with repeated measures on the last two variables), depending on the Persons variables. The dependent variable was the preference rating for each seat position. This rating was interpreted in terms of privacy preference according to the seat position The seat(s) farthest from the superior was (were) considered the most private seat(s); the seats closest to the superior were considered the least private (in all Persons conditions there were two such seats in the front 'row')

Procedure

Each subject was individually presented with diagrams of various seating arrangements and asked to indicate his preference for each seat position The set of diagrams presented to the subjects are illustrated in Figure 2 In accordance with the experimental design mentioned above, each subject responded to 8 forms of seating arrangements, 2 in each of the 3, 4, 5 and 6 Persons conditions The preference rating for each seat position was given on a 7-point scale ranging from 1 (Not at all preferred) to 7 (Preferred very much) The reasons for the preferences were also given by the subjects

It was expected that 1) seat-position preference ratings would vary significantly between the Partition conditions, and more between Partition/ No partition between superior and co-workers because of a status effect, the seat(s) farthest from the superior [that is, the most private seat(s)] would be given the highest preference, and those closest to the superior, the least preference In the presence of a partition between co-workers,

Figure 2: Diagrams of Different Seat Positions Shown to Subjects

Partition Between Superior &Coworkers/ Partition Between Coworkers	Partition Between Superior &Coworkers/ NoPartition Between Coworkers	No Partition Between Superior & Coworkers/ PartitionBetween Coworkers	No Partition Between Superior & Coworkers/ No-Partition Between Coworkers
3 Superior A C B	3 Superior A C B	3 Superior A C B	3 Superior A C B
4 Superior A D B C	4 Superior A D B C	4 Superior A D B C	4 Superior A D B C
5 Superior A E B D C	5 Superior A E B D C	5 Superior A E B D C	5 Superior A E B D C
6 Superior A F B E C D	6 Superior A F B E C D	6 Superior A F B E C D	6 Superior A F B E C D

Letters A B C D E F indicate seat positions

there would be less variation in preference ratings of the various seat positions.

This expectation was based on the findings related to both privacy and personal space (Oldham, 1988, Sommer, 1969, Sundstrom, Herbert & Brown, 1982) The tendency to seek more private seats (solitude) would be more clearly expressed in the absence than in the presence of partitions Privacy would be maintained with the help of greater interpersonal physical distance from the superior.

2) The difference between the preference ratings for the most and least private seat positions would be greatest when the number of persons is large (6-Person condition) and least when the number is small (3-Person condition) This expectation was based on the assumption that the need for privacy (solitude or isolation) would be greater when the number of persons is large (because of a sense of crowding) than when there are fewer persons

Results and Discussion

The preference ratings for the various seat positions in each of the four Persons conditions were subjected to separate analyses of variance (Partition/No partition between Subordinate and Co-workers x Partition/ No partition between Co-workers x Seat Position, with repeated measures on the last two variables) The means and standard deviations of the preference ratings in various conditions, and the summary of the ANOVA results, are presented in Tables 9A to 12B The main results are discussed below

Table 9A

Means and Standard Deviations of Seating Preference Ratings: 3 - Person Condition (Study 2A)

	Partition between Superior & Co-workers (A_1)				No Partition between Superior & Co-workers (A_2)			
	Partition bet Co-workers (B_1)		No Partition bet Co-workers (B_2)		Partition bet Co-workers (B_1)		No Partition bet Co-workers (B_2)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Seat								
C_1 *	5.15	1.56	4.35	1.49	4.30	1.69	4.40	1.05
C_2	6.10	1.68	5.70	1.59	5.15	2.20	5.00	1.97
C_3	5.15	1.56	4.40	1.46	4.40	1.73	4.25	1.16

* C_1 and C_3 were the seats closest to the superior, and C_2 was the seat farthest from the superior.

Table 9B

ANOVA Summary: Seating Preference Ratings (3-Person Condition) (Study 2A)

Source	SS	Df	MS	F	Probability level
Between Ss	318.79	39			
A	18.70	1	18.70	2 39	NS
Error (bet)	300.09	38	7.90		
Within Ss	365.67	200			
B	7 70	1	7 70	2 77	NS
AB	7.57	1	7 57	2 72	NS
Error 1(w)	105.54	38	2.78		
C	46.87	2	23 44	13.28	<.001 @
AC	2.16	2	1.08	< 1	
Error 2(w)	134.13	76	1 76		
BC	0.31	2	0 15	< 1	
ABC	1.06	2	0 53	< 1	
Error 3(w)	60.32	76	0.79		

@
Multiple comparison of means showed that $C_2 > C_1 = C_3$

Table 10A

Means and Standard Deviations of Seating Preference Ratings: 4 - Person Condition (Study 2A)

	Partition between Superior & Co-workers (A_1)				No Partition between Superior & Co-workers (A_2)			
	Partition bet Co-workers (B_1)		No Partition bet Co-workers (B_2)		Partition bet Co-workers (B_1)		No Partition bet Co-workers (B_2)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Seat								
C_1 *	4.90	1.59	4 35	1 27	4.25	1.80	4 35	1 42
C_2	5 95	1 67	5 30	1 21	4.90	2 15	5 50	1 36
C_3	5 95	1 67	5 30	1 21	4.75	2 09	5 35	1 39
C_4	4 80	1.58	4 10	1 33	4 15	1.78	4.25	1.52

* C_1 and C_4 were the seats closest to the superior, and C_2 and C_3 were the seats farthest from the superior.

Table 10B

ANOVA Summary: Seating Preference Ratings (4-Person Condition)
(Study 2A)

Source	SS	Df	MS	F	Probability level
Between Ss	258 35	39			
A	12 40	1	12.40	1.92	NS
Error (bet)	245 94	38	6.47		
Within Ss	626.37	280			
B	1.65	1	1.65	< 1	
AB	19.50	1	19 50	3.17	NS
Error 1(w)	233.97	38	6 16		
C	78.01	3	26 00	14.27	< 001 @
AC	1.18	3	0 39	< 1	
Error 2(w)	207.68	114	1 82		
BC	1.18	3	0.39	< 1	
ABC	1.43	3	0 48	< 1	
Error 3(w)	81.76	114	0 72		

@
Multiple comparison of means showed that $C_2 = C_3 > C_1 = C_4$

Table 11A

Means and Standard Deviations of Seating Preference Ratings: 5 - Person Condition (Study 2A)

	Partition between Superior & Co-workers (A_1)				No Partition between Superior & Co-workers (A_2)			
	Partition bet Co-workers (B_1)		No Partition bet Co-workers (B_2)		Partition bet Co-workers (B_1)		No Partition bet Co-workers (B_2)	
Seat*	Mean	SD	Mean	SD	Mean	SD	Mean	SD
C_1	4.90	1.51	4.40	1.31	4.25	1.80	4.50	1.36
C_2	4.30	1.49	3.40	1.09	3.40	1.35	3.75	1.37
C_3	5.85	1.66	5.15	1.56	4.55	2.18	5.25	1.52
C_4	5.35	1.49	3.55	1.23	3.45	1.43	3.75	1.37
C_5	4.70	1.62	4.40	1.35	4.10	1.91	4.40	1.69

*C_1 and C_5 were the seats closest to the superior, C_3 was the seat farthest from the superior, and C_2 and C_4 were the seats in between.

Table 11B

ANOVA Summary: Seating Preference Ratings (5-Person Condition)
(Study 2A)

Source	SS	Df	MS	F	Probability level
Between Ss	306.64	39			
A	12.96	1	12 96	1.68	NS
Error (bet)	293.68	38	7.73		
Within Ss	756.40	360			
B	1.69	1	1.69	< 1	
AB	26.01	1	26 01	4.04	NS
Error 1(w)	244.70	38	6.44		
C	118.71	4	29 69	17.44	<.001 @
AC	1.51	4	0 38	< 1	
Error 2(w)	258.67	152	1.70		
BC	1.38	4	0.35	< 1	
ABC	2.27	4	0.57	< 1	
Error 3(w)	101.45	152	0.67		

@
Multiple comparison of means showed that $C_3 > C_1 = C_5 > C_2 = C_4$

Table 12A

Means and Standard Deviations of Seating Preference Ratings: 6 - Person Condition (Study 2A)

	Partition between Superior & Co-workers (A_1)				No Partition between Superior & Co-workers (A_2)			
	Partition bet Co-workers (B_1)		No Partition bet Co-workers (B_2)		Partition bet Co-workers (B_1)		No Partition bet Co-workers (B_2)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Seat								
C_1 *	4 85	1 81	4 25	1 45	4.50	1 76	4 80	1 44
C_2	3.95	1 82	3.20	1 15	3.30	1.52	3 90	1 33
C_3	5.65	1 98	5 15	1 26	4 80	2 01	5.40	1 23
C_4	5 65	1 98	5.15	1.26	5.15	1 78	5.40	1.31
C_5	4 00	1.83	3.55	1 31	3.40	1.43	3.95	1.39
C_6	4 80	1 82	4 20	1.44	4.30	1 89	4.65	1 66

* C_1 and C_6 were the seats closest to the superior, C_3 and C_4 were the seats farthest from the superior, and C_2 and C_5 were the seats in between.

Table 12B

ANOVA Summary: Seating Preference Ratings (6-Person Condition) (Study 2A)

Source	SS	Df	MS	F	Probability level
Between Ss	292 70	39			
A	0 35	1	0 35	< 1	
Error (bet)	292 35	38	7.69		
Within Ss	1139.25	440			
B	0 75	1	0 75	< 1	
AB	32 55	1	32 55	3.02	NS
Error 1(w)	409 45	38	10 77		
C	222 93	5	44 59	18 46	< 001
AC	1 98	5	0 40	< 1	
Error 2(w)	458 83	190	2.41		
BC	0 53	5	0 11	1.84	NS
ABC	1 18	5	0 24	4.09	< .01
Error 3(w)	11 03	190	0 06		

[a] Multiple comparison of means showed that $C_3 = C_4 > C_1 = C_6 > C_2 = C_5$

Contrary to expectations, the Partition/ No partition variable (with respect to both the superior and co-workers) had no significant main effect in any of the Persons conditions However, Seat Position had a significant main effect, as predicted, in all the Persons conditions That is, in the 3-person, 4-person, 5-person and 6-person conditions, the seat(s) that was (were) at the back (farthest from the superior) was (were) preferred significantly more than the seats closest to the superior, as shown by multiple comparisons of the means with the help of the Tukey(a) procedure (Winer, 1971) In the case of the 5-person and 6-person conditions, the least preferred seats were not those closest to the superior, but the ones in the second 'row' - that is, the seats which were between the one(s) farthest from the superior, and the ones closest to the superior In addition, a significant 3-way interaction (between Partition/No partition between the superior and co-workers, Partition/ No partition between co-workers, and Seat position) was found in the 6-person condition In this interaction, a multiple comparison of means by means of the Tukey (a) procedure (Winer, 1971) revealed that the greatest preference was shown (in the all-Partition condition) for the two seats farthest from the superior, and least (in the No Partition between Co-workers condition) for the seats in the second 'row', the preference was intermediate for the seats closest to the superior (in all the Partition conditions) Within each 'row' there was no significant difference in seat preference.

In order to assess the effect of the number of persons on seating preference, the frequencies of preference for the most and least 'private' seats across the four Persons conditions were compared. No significant differences in frequencies were found in these preferences When the magnitude of the highest preference rating was compared, yet another unexpected finding emerged In the presence of a partition, the highest mean preference was greatest in the 3-person condition (in the presence of fewer persons), followed by that in the 4-person condition, still lower in the 5-person condition, and least in the 6-person condition (in the presence of a larger number of persons) In other words, the preference for the most private seats, instead of increasing in magnitude with the number of persons, actually showed a decreasing tendency In the absence of a partition, there was no consistent trend; rather, the means varied across the Persons conditions

In short, the overall pattern of seat position preferences in the four Persons conditions indicated that consistent with expectations, the most 'private' seats were preferred more than the other seats, but contrary to expectations, this preference was expressed regardless of the presence or absence of a partition, and when the number of persons was both large and small But Partition and Persons did have some effect in the case of the 6-person condition, as was evident in the significant 3-way interaction in this condition

The reasons given by the subjects indicated that the most private seats were preferred most because of a need for being

away from the direct surveillance of the superior

In the light of the proposed hypotheses, some of the effects of seat position on seating preference were in accordance with expectations These findings were consistent with those related to status effects on personal space (Sommer, 1969) However, the findings were contrary to privacy studies that showed a significant effect of partitions and enclosures (Oldham, 1988, Sundstrom et al 1982) The absence of the effect of the number of persons was also inconsistent with findings related to crowding, except in one respect In the 5-person and 6-person conditions, it was the most 'crowded' seat(s) that was(were) preferred least These seats were between two co-workers and created more discomfort than even the seats closest to the superior Another inconsistency with respect to earlier findings was that the preference for the most private seats tended to decrease rather than increase with an increase with the number of persons (that is, from the 3-person to the 6-person condition) In spite of the crowding effects implied by the reasons cited by the subjects, this finding did not bear out the expectations based on crowding However, this finding was statistically non-significant

The non-significant effects of the Partition and Number of Persons variable in the present study were unexpected and somewhat puzzling (although some effect of the Partition variable could be seen in the three-way interaction found in the 6-person condition between the two Partition variables and Seat position) The non-significant results could be attributed to three possible reasons First, subjects were indicating their preferences

hypothetically in the context of two-dimensional diagrams, and not real-life settings. Possibly, in a more realistic context, the effects of Partition and Number of persons would be stronger Secondly, subjects were given diagrams with or without partitions, and were asked to mention their seat-position preference ratings They may not have paid sufficient attention to the presence or absence of partitions Possibly, the findings might differ if subjects were asked to indicate their preference for a partition, and actually place miniature partitions in the setting, if they so wished. Thirdly, it is likely that the effect of a partition emerges only beyond a certain level of perceived crowding or density In the presence of very few persons (as in the 3- and 4-person conditions) the need for privacy may not be salient because there is no crowding But in the presence of a larger number of persons, privacy needs increase, and partitions may have a significant effect on privacy preferences This possibility was suggested by the observation that the only role that Partition played was in the interactive effect, which was found in the 6-person condition but not in the other Persons conditions In other words, it seems that if Partition is to have any effect on seating preference, a certain number of persons is required in the situation

Considering these possibilities a second study was conducted with a small sample, involving essentially the same variables, but a modification of the procedure Study 2B is described below

Study 2B

In view of some of the unexpected findings of Study 2A, the second study attempted to examine the effect of the number of persons using a modified, and possibly more realistic procedure Instead of indicating their preferences for various seats within a given seating arrangement in diagrammatic form, subjects were asked to arrange miniature chairs and tables in a given floor plan of an office. They were also asked whether they would prefer partitions, and if so, in what positions In other words, Study 2B examined privacy preference through seat placement and partition preference/placement.

Method

Subjects

Forty male office employees of a technological institute in Northern India, ranging in age between 25 and 56 years (Mean age = 37.50 years, SD = 9 46), participated in the present study.

Design

One independent variable, namely, the Number of Persons (6 or 10) was included Half of the subjects were assigned to each of two Persons conditions The dependent variables were (a) the pattern of seat placement (including the subject himself), (b) the reasons for the seat placement pattern, and (c) whether the subject would prefer to place partitions between himself and other co-workers, and if so, whether he would change the pattern of seat placement In both the Persons conditions, a partition was placed between the superior and co-workers, but there was initally no partition between the co-workers This aspect was

kept constant

Procedure

Subjects were given the floor plan (miniaturized, on a 18" x 12" styrofoam board) of an office, indicating 25 possible positions. Each subject was individually asked to demonstrate his preferred pattern of seat placement in the floor plan, by actually placing miniature chairs and tables made of cardboard The subject was asked to keep in mind the number of persons present, and to specify where he would place himself He was then asked to give the reasons for his preferred placement pattern After the subject had indicated the preferred seat placement pattern and the reasons, he was asked if he would prefer to place partitions between himself and his co-workers If he answered in the affirmative, he was provided with miniature cardboard partitions and asked to place them as he thought appropriate Following the partition placement, the subject was allowed, if he so wished, to modify the first seat placement pattern Reasons for the placement of partitions and modified placement pattern were also elicited The subjects' placement patterns were noted on a separate floor-plan sheet by marking crosses wherever the chairs and tables, as well as the partitions (where chosen) were placed Any modifications in seat placement after the partition placement were also noted on a separate floor plan sheet

Considering the findings of Study 2A, and also earlier studies of privacy, and of seating preferences in the context of personal space and crowding, it was expected that

1) more isolated seats (for example, corner seats, and seats with

spaces between them) would be preferred with a greater likelihood than non-isolated seats (for example, seats in the center of the floor plan, or immediately next to another co-worker) in the 10-person condition than in the 6-person condition

2) partitions would be preferred with a greater likelihood in the 10-person condition than in the 6-person condition

The rationale for both the hypotheses was that a larger number of persons would be more likely to induce a greater sense of crowding, and hence lead to a greater need for privacy (solitude) than fewer persons. Privacy can be maintained both by selecting isolated seats and/or partitions.

Results and Discussion

The major dependent variable in the present study, namely, seat placement pattern, had to be examined in a descriptive way, and presented graphically Therefore the seat placement patterns in the 6- and 10-person conditions were inspected and the frequencies of placement of the self in 'private' positions (that is, corner seats, seats placed alongside the wall, or seats that were distant from the co-workers) were compared. In addition, the frequency of partition preference was also compared In cases where the subject modified the seat placement after choosing partitions, the second placement was compared with the initial placement

The seat placement patterns indicated by the subjects are exhibited in Appendix 2

It was found that, in both the 6-person and 10-person conditions, 90% of the subjects (18 out of 20) were likely to

place the seats along the walls, with equal spaces between the seats. In both cases the reasons mentioned were symmetry of arrangements, and availability of space in the middle of the room (6-person condition), and symmetry and ease of electronic communication (10-person condition) That is, contrary to expectations, there was no difference in the seat placement pattern between the two Persons conditions With respect to the placement of the subject himself, no difference was found between the two conditions In both the conditions, subjects placed themselves in a corner seat, or along the wall, rather than in a central position (90%, or 18 out of 20 subjects, in the 6-person condition, 85%, or 17 out of 20 subjects in the 10-person condition) The reason mentioned in both conditions was that in their preferred seats subjects could work undisturbed and also watch others working Overall, then, no difference was found with regard to the Number of Persons variable This was contrary to expectations.

With regard to partition preference, as predicted, partitions were significantly more likely to be preferred in the 10-person condition than in the 6-person condition Whereas only 30% (6 out of 20) preferred partitions in the 6-person condition, 85% (17 out of 20) in the 10-person condition preferred partitions (Chi-square = 5 26, df=1, p < 05) The reason given for the 'No partition' preference in the 6-person condition was that there was sufficient space between the co-workers The reason given for the Partition preference in the 10-person condition was that it would provide them with a better working environment In the 10-person condition, those who did not

prefer partitions mentioned restriction of movement as their reason. Among those subjects who chose partitions, 4 out of 6 subjects (67%) in the 6-person condition, and 8 out of 17 subjects (47 1%) in the 10-person condition also modified their initial seat placement pattern. An inspection of the modified seat placements revealed that there was no consistent pattern in the changes, some subjects moved the placement pattern outward (that is, towards the walls), whereas some moved a few seats inwards For their own position, some subjects moved from a corner or next-to-the-wall seat to an inner seat because they had a surrounding partition

In short, the findings indicated that although seat placement patterns did not differ between the two Persons conditions, partitions were more likely to be preferred when there were more persons This supports the suggestion made at the end of Study 2A that the need for privacy by using partitions in an office setting may be felt only when the number of co-workers is sufficiently large The seat placement patterns also showed that private seats (corner seats, seats alongside the wall, or seats that were not too close to a co-worker) were preferred regardless of the number of persons It is possible that the floor plan presented in this study was such that isolated seats could be easily selected in both the 6-person and 10-person conditions Besides, for the few subjects who did not opt for partitions in the 10-person condition, the crowding that might be introduced by the partitions was mentioned as a reason. Thus they seemed to be avoiding crowding and the consequent

restriction on the freedom of movement (Saegert, 1978) in the 10-person condition, they still exhibited a need for privacy by choosing a corner seat or wall-side seat for themselves. This aspect of the findings poses a further question: could the tendency to avoid crowding be stronger than the tendency to maintain privacy (solitude), when the number of persons is large?

General Discussion and Summary

Taking together the findings of Studies 2A and 2B it can be said that there were some unexpected results, such as the absence of a significant effect of partitions and the number of persons on seating preference (Study 2A), and the absence of a significant effect of number of persons on seat placement pattern (Study 2B) At the same time, some of the expectations in both studies were borne out In Study 2A, Seat position did turn out to be a significant variable, and the Partition variables interacted with Seat position to affect seating preference when the number of persons was large In the case of Study 2B partition preferences differed between a smaller and larger number of persons, and indicated a need for isolation or solitude in the presence of a larger number of co-workers

Considering the two sets of findings in the light of the questions raised at the beginning, it can be said that (1) contrary to the expectations, and the implications of earlier research findings, when the seating pattern was given to the subjects, the presence of a partition (either between the superior and co-workers and/or between co-workers) did not by itself influence seating preferences, but it did have an

interactive effect along with seat position when the number of persons was large,

(2) contrary to the expectations, the number of persons did not have a significant effect on either seating preference or seat placement In the case of both a smaller and larger number of persons, the most private seats were preferred most, and the least private seats, or the most crowded ones, were preferred least While the non-significant effect of the number of persons on seating preference and seat placement was inconsistent with some earlier findings it could be explained in terms of the total setting of the present studies The reasons given by the subjects involved factors such as solitude preference, working undisturbed, and avoiding crowding, in the case of both a smaller and larger number of persons,

(3) consistent with the expectations, partition preference by subjects was significantly influenced by the number of persons partitions were significantly more likely to be preferred when more persons were present than when there were fewer persons in the setting This was explained on the basis of privacy (solitude) preference, and the desire to work undisturbed (indicative of both privacy and a reaction to crowding)

Notwithstanding some of the unexpected results of the two studies, overall, the reasons cited by the subjects facilitated the explanation of their seating preferences and seat/partition placement,

(4) in the case of both seating preference when the seating pattern was given to the subject (Study 2A), and seat placement when the subject was allowed to choose the seat positions (Study

2B), the choice of the most private seats indicated also that a distance was maintained from the superior. This showed that status also had an effect of seating preference, as has been demonstrated in some earlier studies of personal space and seating preference (Sommer, 1969).

In general, the findings could be explained in terms of the desire for privacy (solitude) implying prevention of visual exposure and access (Archea, 1977) as well as avoidance of crowding The partition preference shown in the case of seat placement study was in accordance with the findings of earlier studies involving the effect of partitions and open-plan offices (Oldham, 1988, Sundstrom, Herbert & Brown, 1982) However, the partition effect was ambiguous in the case of seating preferences The latter was ascribed to methodological aspects of the first study

The two studies also point out the importance of the method used for examining privacy preference In both Study 2A and Study 2B the indicators of privacy preference were indirect. The procedure in the second study was very similar to that used by Kuethe (1962), Little (1965) and others, and suffers from the limitations of any projective method It is strongly suggested that field studies should be conducted to see directly how spatial and architectural variables, along with the number of persons, influence the sense of privacy

At this stage in the present research, some answers had been obtained to most of the initial questions, specifically those pertaining to a philosophical aspect of privacy (the PER view), a

physical-spatial variable (the presence of partitions) and a situational variable, (the number of persons). The final study in the present research dealt with psychological correlates of privacy

Chapter 4

Privacy Preference, Sense of Control over Privacy, and Discrepancy between Desired/Actual Privacy: A Correlational Study (Study 3)

This chapter reports the third and final study in the present research on privacy The study described here examined the relationship between privacy preference, and two psychological correlates, namely, the sense of control over privacy, and the discrepancy between desired and actual privacy

The review of research on privacy presented in the first chapter demonstrated that in the conceptualization of privacy, a major dimension highlighted by many researchers was control and choice of interaction (for example, Altman, 1975, 1977, Kelvin, 1973; Margulis, 1977, Westin, 1967) These views propose that privacy should be defined in terms of freedom to choose or restrict social interaction, and to control others' access to information about oneself. If control and choice are inherent components of privacy, then a positive relationship would be expected between privacy preference and an external measure of the sense of control However, there seems to be no systematic empirical test of this relationship in the existing literature The present study was undertaken mainly to examine this relationship, on the following rationale

First, although perceived or personal control has been consistently found to be a correlate of crowding and personal space - concepts related to privacy - there seem to be few attempts to examine the exact role of control as a correlate of privacy Yet there is evidence that control may be a significant correlate of privacy For example, Smith (1982) found that

privacy needs among prisoners were related to a sense of control, depending on the extent of spatial restriction in the setting Lowered perceived control has been said to be a major cause of negative reactions to crowding (Baron & Rodin, 1978; Schmidt & Keating, 1979) Similarly, in the behavioural constraint model, a feeling of reduced freedom has been stipulated as the explanation for crowding stress The constraint could be experienced in terms of goal interference, by way of personal or neutral thwarting (Stokols, 1976), interference by way of blocking of opportunities because there are too many people, as proposed in the ecological approach (Wicker, 1973), or merely in terms of a spatial restriction of movement (Saegert, 1978) All of these ideas imply restriction or behavioural constraint in a social situation, which curtail control or choice They may also apply to privacy preference Thus if control/choice can be shown to be a significant external correlate of privacy, this would have implications for the theoretical validation and extension of the concept of privacy

Secondly, the idea of control itself has been used with different meanings in the research on crowding and personal space These include the concept of internal or external locus of control proposed by Rotter (1966), as a correlate of crowding (McCallum, Rusbalt, Hong, Walden & Schopler, 1979), and various forms of personal control proposed by Baron and Rodin (1978), such as decision control (the extent to which goals can be selected), outcome control (the extent to which outcomes are influenced by one's actions), onset control (the extent to which

exposure to crowded situations could be chosen), and offset control (the degree to which the person is free to leave a crowded situation) Focusing on cognitive control (induced by providing specific information), Langer and Saegert (1977) showed that in a crowded setting, inducing cognitive control through information reduces the negative reactions and also leads to improved performance. In addition, Schmidt and Keating (1979) have adopted Averill's (1973) distinction between behavioural, cognitive and decision control in the context of crowding They concluded that crowding reactions are actually attributions resulting from a loss of any of the three kinds of personal control In the context of Indian households, perceived control (which would be more situation-specific than locus of control) was found to have positive effects in high- as well as low-density households (Ruback & Pandey, 1991) All of these forms of 'control' imply a control over the external environment or other people The kind of control implied in the context of privacy seems to differ from the forms of control described above, in the context of crowding The existing privacy conceptualizations view control (resulting from choice or freedom) as a component or inherent part of privacy, but have not focused on control as a correlate In planning the present study, it was felt that examining control as a correlate, and specifically in terms of a sense of control over privacy (rather than control over general life events or other outcomes), might yield more definite information on both control and privacy

Thirdly, the notion of control in privacy may have implications for architectural design, because the very idea of

'design' assumes that there is a choice or freedom in bringing about a change In the context of privacy, a high sense of control might be associated with the likelihood of adopting means to obtain privacy through environmental modifications, such as the use of barriers or partitions This aspect of control, namely, bringing about a change in the external situation, does not seem to be a part of the contemporary conceptualization of privacy Although control as a determinant of design was not to be examined in the present study, it was felt that information regarding the sense of control over privacy might help in explaining why people choose or do not choose to modify architectural or spatial design.

Finally, as in the case of the first two studies, exploring the relationship between privacy preference and the sense of control in a non-Western (Indian) sample would help in verifying the cross-cultural generality of this relationship.

Study 3 was conducted on the rationale indicated above Along with the sense of control (henceforth called Control), the discrepancy between desired and actual privacy (henceforth called Discrepancy) was also included as a variable, following Altman's (1975) proposition of the space-regulating relationship between desired and achieved privacy The theoretical assumption was that the desired/actual privacy discrepancy might be related to privacy preference On one hand, a smaller discrepancy might lower privacy preference, because privacy no longer appears attractive, or it might increase privacy preference because the person, being satisfied with his/her existing level of privacy,

namely, Solitude, Intimacy, Reserve and Anonymity) would be positively related to Control over all forms of privacy, this expectation was based on earlier findings relating control to privacy and crowding, cited above. Based on the findings of Study 1, it was also expected that the relationship would be stronger in the case of Solitude and Intimacy than in the case of Reserve and Anonymity because the former two forms of privacy are preferred more than the latter forms

b) Discrepancy (in all components of privacy) would be negatively related to Privacy Preference (for all components). This was based on the assumption that the smaller the discrepancy between Desired and Actual privacy, the more satisfied the subject would be with his existing level of privacy, and therefore the greater his general preference for privacy The larger the Discrepancy in Desired and Actual Privacy, the less satisfied the subject would be, and therefore the less Privacy Preference he would express

Alternatively, there could be a positive relationship between Discrepancy and Privacy Preference, following Brehm's (1966) idea of psychological reactance The greater the discrepancy in Desired/Actual Privacy, the more attractive various forms of privacy would be, and therefore the greater the subjects' Privacy Preference The smaller the discrepancy, the less attractive privacy would be, and therefore, the lower the subjects' Privacy Preference

Theoretically, either kind of relationship could emerge, but in the present context, the expectation was more towards a

negative relationship between Discrepancy and Privacy Preference. c) Discrepancy would be negatively related to Control: the greater the Desired/Actual Privacy discrepancy, the lower the sense of control over privacy. Once again, this expectation was based on the findings of earlier studies.

Method

Subjects

Forty non-teaching staff (office personnel)* and 30 teaching staff (faculty) of a technological institute in North India participated in the study All subjects were males, ranging in age from 25 to 58 years

Procedure

The Privacy Preference - Control inventory was individually administered to the subjects The English or Hindi version of the questionnaire was used, depending on the subject's preferred language

Tools

The inventory administered consisted of three sections, the first one pertaining to Privacy Preference (the Privacy Preference Scale), the second one pertaining to Control over the different components of privacy (the Privacy Control Scale), and the third one related to the Desired and Actual Privacy, in the case of the four components (the Desired/Actual Privacy Scale)

Since the purpose of the present study differed from that of Study 1, instead of using the inventory devised for Study 1, a

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* These subjects had also participated in Study 2B. No relationship was found between their responses in Study 2B, and those given in the present study

new inventory was developed (non-standardized) that would consist of direct statements pertaining to the three variables Respondents had to indicate their ratings in response to each item. The Privacy Preference - Control Inventory is presented in Appendix 3A and 3B (English as well as Hindi versions).

The Privacy Preference Scale consisted of a total of 16 items, with four items each for the four Privacy components. Of these four items, two were related to liking for privacy, and two were related to reactions to unavailability, or violation of privacy Privacy Preference was thus indicated for each component in the form of two scores, a Liking score (the sum of ratings on the two Liking items), and a Reaction score (the sum of ratings on the two Reaction items) Ratings were given on a 11-point scale, ranging from 0% (Not at all true) to 100% (Absolutely true) Thus a high score indicated greater Privacy Preference, and a low score, lower preference

The Privacy Control Scale consisted of four basic 'stem' items, each followed by four statements, pertaining to the four components of privacy Of the four basic items, two indicated control in the form of regulation, and the remaining two indicated control in the form of freedom Subjects were required to rate their responses on a 11-point rating scale, ranging from 0% (Not at all true) to 100% (Absolutely true) Each subject obtained 8 Control scores, a Regulation score and a Freedom score for each of the privacy components, namely, Solitude, Intimacy, Reserve and Anonymity In this case also, the higher the score, the greater the sense of control

In the case of the Desired/Actual Privacy Scale, four basic items were presented depicting the four privacy components. In each case the subject had to indicate (1) the ideal amount of privacy he would like (Desired Privacy), and (2) the actual amount of privacy he had (Actual Privacy). Responses were rated on a 11-point scale ranging from 0% to 100%, signifying the amount of Privacy Each subject obtained 8 scores, four indicating Desired Privacy, and four indicating Actual Privacy, for the four privacy components A Discrepancy Index was calculated as follows

$$\text{Discrepancy Index} = \frac{\text{Desired Privacy} - \text{Actual Privacy}}{\text{Desired Privacy}} \times 100$$

Each subject thus obtained 4 Discrepancy Indices corresponding to the four privacy components

Results

A comparison of the ratings given by the office personnel sample, with those given by the faculty sample indicated no significant differences, therefore, the two samples were combined for further analysis

Sufficient information about the components of privacy had already been obtained in Study 1, and constructing a standardized inventory for measuring privacy was not one of the aims of the present study Therefore, a factor analysis of the different scales was not considered necessary in the present study Instead, in order to verify the consistency of the privacy components, within each variable, namely, Privacy Preference, Control, and Desired/Actual Privacy, inter-item correlations were

computed. These are presented in Tables 13, 14 and 15.

I. Inter-item correlations within each variable

An inspection of the inter-item correlations (Table 13) reveals that in the case of Privacy Preference, the two Liking items and the two Reaction items within the components of Solitude, Anonymity and Reserve were positively and significantly inter-correlated as expected, this inter-correlation was non-significant in the case of the two Liking items within the Intimacy component Similarly, in the case of the Control components (Table 14), the Regulation and Freedom items were significantly inter-correlated within each Privacy component, as expected. In the case of Desired/Actual Privacy also (Table 15), the inter-correlations between Desired and Actual Privacy were significant in the case of all Privacy components except the Solitude component In general, this finding demonstrated a consistency in responses given to the Privacy components, both within and across the dependent variables

II. Highest and lowest means of Privacy Preference, Control, Desired/Actual Privacy and Discrepancy.

The means of the constituent variables of Privacy Preference, Control, Desired/ Actual Privacy and the Discrepancy in Desired/Actual Privacy, were compared These means along with the standard deviations are presented in Table 16. It was found that within Privacy Preference, the mean preference (as indicated by Liking as well as Reaction) was highest in the case of Intimacy, followed by Reserve and then by Solitude Anonymity Preference had the lowest mean. This pattern of means closely

Table 13

Inter-item Correlations in the Privacy Preference Scale
(Study 3, N =70)

Sol Lk=Solitude Liking I Lk=Intimacy Liking R Lk=Reserve Liking A Lk=Anonymity Liking
Sol RC=Solitude Reaction I RC=Intimacy Reaction R RC=Reserve Reaction A RC=Anonymity Reaction

Item		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Sol Lk	-															
2	Sol Lk	.55**	-														
3	Sol Rc	.39**	.52**	-													
4	Sol Rc	.41**	.52**	.71**	-												
5	I Rc	.14	.17	.22	.18	-											
6	I Rc	.02	-.00	.38**	.27*	.53**	-										
7	I Lk	.33**	-.31**	-.07	-.14	.03	.20	-									
8	I Lk	-.14	-.29**	-.23*	-.25*	.18	.02	.30**	-								
9	R Lk	.28*	.32**	.45**	.28**	.35**	.50**	.18	-.18	-							
10	R Lk	.35**	.40**	.59**	.53**	.25*	.41**	-.14	-.14	.40**	-						
11	R Rc	.27*	.18	.20	.16	.24*	.46**	-.03	-.30**	.57**	.13	-					
12	R Rc	.37**	.47**	.20	.15	.19	.19	-.06	-.42**	.48**	.16	.43**	-				
13	A Lk	.23*	.43**	.40**	.18	.23*	.19	.11	-.21	.39**	.34**	.05	.39**	-			
14	A Lk	.24*	.31**	.45**	.37**	.19	.26*	.06	-.28**	.31**	.40**	.10	.38**	.69**	-		
15	A Rc	.29**	.27*	.31**	.34**	.26*	.42**	-.03	-.16	.36**	.47**	.26*	.24**	.44**	.60**	-	
16	A Rc	.52**	.42**	.44**	.45**	.23*	.25*	.11	-.16	.46**	.39**	.29**	.39**	.41**	.42**	.59**	-

** p < .01 * p < .05

Table 14

Inter-item Correlations in the Privacy Control Scale
(Study 3: N=70)

Item	1	2	3	4	5	6	7	8
1 Solitude Regulation	-							
2 Intimacy Regulation	.39**	-						
3 Reserve Regulation	.34**	-.05	-					
4 Anonymity Regulation	.41**	.06	.54**	-				
5 Solitude Freedom	.52**	.23*	.25*	.40**	-			
6 Intimacy Freedom	.20	.58**	-.08	.15	.36**	-		
7 Reserve Freedom	.10	.02	-.06	.27*	.08	.19	-	
8 Anonymity Freedom	.16	-.05	.16	.69**	.29**	.10	.48**	-

** p < .01 * p < .05

Table 15

Inter-item Correlations in the Desired/Actual Privacy Scale
(Study 3: N = 70)

Item	1	2	3	4	5	6	7	8
1 Desired Solitude	-							
2. Actual Solitude	.19	-						
3. Desired Intimacy	.65**	-.01	-					
4. Actual Intimacy	.22	.70**	.37**	-				
5. Desired Anonymity	.33**	.22*	.30**	.27*	-			
6. Actual Anonymity	-0.00	.53**	.03	.46**	.39**	-		
7. Desired Reserve	.55**	.20	.49**	.28*	.48**	.26*	-	
8. Actual Reserve	.05	.50**	-.03	.40**	.30**	.64**	.54**	-

** p <.01 * p <.05

Table 16 *

Means and Standard Deviations of Scores on Privacy Preference, Control over Privacy and Desired/Actual Discrepancy
(Study 3. N=70)

		Privacy Preference Components		Control Components	
		Liking	Reaction to Violation	Regulation	Freedom
Solitude	Mean	46.43	42.00	Mean. 69 14	67.71
	SD·	20.22	23 47	SD. 24.00	22.48
Intimacy	Mean.	75.71	74 50	Mean· 74 00	73.14
	SD·	18.34	21 72	SD 18.99	24.35
Reserve	Mean	44.93	52 07	Mean 45.86	62.43
	SD	20.44	21 44	SD. 21.16	21.56
Anonymity	Mean	27.07	27 21	Mean 37.00	42.57
	SD.	17 50	17 38	SD 22.99	24.59

		Desired/Actual Privacy		Discrepancy Index [(Desired - Actual)/Desired × 100]		
		Desired	Actual	Total Sample	Desired > Actual	Desired < Actual
Solitude	Mean	72 43	55 00	Mean 0 99	31.98	184.95
	SD	22 74	18 47	SD 128 98	16.22	269.95
					n=60	n=10
Intimacy	Mean.	79 14	63 00	Mean. 2.11	23.83	356.25
	SD	22.38	19 36	SD. 122 78	18.38	343.86
					n=66	n=4
Reserve	Mean	60 14	44 86	Mean: 8 46	27.00	405 56
	SD	22.47	19 39	SD 118 51	19.31	368.26
					n=67	n=3
Anonymity	Mean	48 29	37 00	Mean. - 3.68	30.74	313 47
	SD	25.99	22 54	SD. 139 52	21.04	285 05
					n=63	n=7

* All ratings were given on a scale ranging from 0% (Not at all true) to 100% (Absolutely true)

resembled that found in Study 1, in that Intimacy and Solitude Privacy were preferred more than Reserve and Anonymity Privacy. The only deviation was that Reserve Preference was higher than Solitude Preference In the present study, the Solitude means were much lower than the Intimacy means, unlike those found in Study 1, in which Intimacy and Solitude means were very close together It may be recalled that the inventories used to measure Privacy Preference in Studies 1 and 3 were different (although in both cases the items were related to Westin's four components), yet the overall pattern of preference for the four Privacy components exhibited more similarities than differences.

In the case of Control, the Intimacy Regulation and Freedom means were the highest, followed by the Solitude Regulation and Freedom means Still lower were the Reserve Regulation and Freedom means The Anonymity Regulation and Freedom means were the lowest This pattern of means shows consistency with that obtained for Privacy Preference, not only within the present sample, but also with the pattern obtained in the first study

When the Desired/Actual Privacy scores were examined, the older pattern emerged again The highest means were those in the case of Desired Intimacy and Desired Solitude, followed by Desired Reserve and Desired Anonymity The Actual Privacy means followed the same pattern but were all lower than the Desired Privacy means, and were much closer together, which was in accordance with the general expectation· namely, that the actual privacy experienced by the subjects would be lower than the desired level, in the case of all forms of privacy

Inspection revealed that although most subjects mentioned a higher level of Desired Privacy than Actual Privacy, there were some who showed a reverse pattern Therefore, the Discrepancy Index for each Privacy component was calculated (a) algebraically, for the total sample (including both those in the Desired > Actual Privacy group and those in the Desired < Actual Privacy group), and then (b) in order to get a distinct picture about the discrepancy, separately for the two groups As Table 16 shows, considering the mean Discrepancy Indices for the total sample, the mean was highest for the Reserve Discrepancy Index, and lowest for the Solitude Discrepancy Index. The mean for the Intimacy Discrepancy Index was higher than that for Solitude but much closer to it than to the mean for Reserve In the case of the Anonymity Discrepancy Index, the mean was in the negative direction, indicating that overall, Desired Anonymity was lower than Actual Anonymity However, when the Discrepancy Indices were calculated separately for the Desired > Actual Privacy, and the Desired < Actual Privacy groups, a very different pattern of means emerged In the case of the Desired > Actual Privacy group, the mean Discrepancy Index was highest for Solitude, very closely followed by Anonymity, lower for Reserve, and lowest for Intimacy In the case of the Desired < Actual Privacy group, this index was highest for Reserve, followed by Intimacy, lower for Anonymity, and lowest for Solitude Since the majority of the subjects belonged to the Desired > Actual Privacy group, the pattern of mean Discrepancy Indices of this group was taken as the most appropriate indicator of the Discrepancy measure In other words, most of the respondents felt that the discrepancy in

the Desired/Actual Privacy was greatest in the case of Solitude and Anonymity (that is, they were actually getting much less Solitude and Anonymity than they desired to have) and least in the case of Intimacy and Reserve. It may also be noted that the differences between the four mean Discrepancy Indices were not large or significant, and indicate only a trend

III. The relationships between a) Privacy Preference and Control, b) Privacy Preference and Discrepancy, and c) Discrepancy and Control:

These relationships were examined with the help of the appropriate multiple regression analyses, as described below The results have been presented Tables 17 to 19.

a) Privacy Preference and Control A composite Privacy Preference score was computed for each privacy component by adding the Liking and Reaction scores. Thus four Preference scores were obtained, namely, Solitude Preference, Intimacy Preference, Reserve Preference and Anonymity Preference In the case of Control, the four Regulation scores (namely, Solitude Regulation, Intimacy Regulation, Reserve Regulation, and Anonymity Regulation) and four Freedom scores (namely, Solitude Freedom, Intimacy Freedom, Reserve Freedom, and Anonymity Freedom) were considered These variables were subjected to a multiple regression analysis, with the 4 Privacy Preference scores as the dependent variables, and the 8 Control scores as the independent variables The results of this multiple-regression analysis (Table 17) indicated that 6 out of the 8 components of Control were significant predictors of Privacy

Table 17

Privacy Preference and Control: Multiple Regression Analysis Results
(Study 3· N = 70)

Independent Variables (8) Control components
Dependent Variables (4) Privacy Preference components

Dependent Variable. Solitude Preference Score

Step	MultiR	Rsq	F(Eqn)	Sig	Beta	Variables
1.	26	.07	4 80	03	-.26	Freedom over Intimacy
			df(1,68)			

Dependent Variable Intimacy Preference Score

Step	MultiR	Rsq	F(Eqn)	Sig	Beta	Variables
1.	.50	25	22.83	00	50	Regulation over Intimacy
			df(1,68)			
2	.55	.30	14 33	.00	- 22	Freedom over Anonymity
			df(2,67)			
3.	59	.35	11 74	00	24	Freedom over Solitude
			df(3,66)			

Dependent Variable: Anonymity Preference Score

Step	MultiR	Rsq	F(Eqn)	Sig	Beta	Variables
1	26	.07	4.87	.03	26	Freedom over Solitude
			df(1,68)			
2	44	19	8.04	00	-.38	Freedom over Intimacy
			df(2,67)			

Preference Intimacy Freedom significantly predicted Solitude Preference, explaining 7% of its variance, and also predicted Anonymity Preference, explaining 12% of its variance. Solitude Freedom significantly predicted Intimacy Preference, explaining 5% of its variance, and also Anonymity Preference, explaining 7% of its variance Intimacy Regulation significantly predicted Intimacy Preference, explaining 25% of its variance Anonymity Freedom significantly predicted Intimacy Preference, and explained 5% of its variance None of the Control variables significantly predicted Reserve Preference Among the Privacy Preference components, Intimacy Preference was the best predicted component, with 35% of the variance in this component being explained by three Control variables In the case of Anonymity Preference, 19% of the variance was explained by two Freedom variables Overall, it was the Freedom component, rather than the Regulation component of Control that was related to Privacy Preference The only case in which Regulation was highlighted was that of Intimacy Regulation which explained the largest proportion of variance in Intimacy Preference

With regard to the direction of the relationship, it was hypothesized that overall, Privacy Preference variables would be positively related to Control variables Considering the significant relationships, the results revealed positive relationships between Intimacy Regulation and Intimacy Preference, between Solitude Freedom and Intimacy Preference, and between Solitude Freedom and Anonymity Preference The other relationships were negative (namely, those between Intimacy

Freedom and Solitude Preference, between Anonymity Freedom and Intimacy Preference, and between Intimacy Freedom and Anonymity Preference). In other words, the expectation with regard to a positive relationship between the Privacy Preference and Control variables was only partially supported.

b) Privacy Preference and Discrepancy The four composite Privacy Preference scores (as indicated above), and the four Discrepancy Indices (namely, Solitude, Intimacy, Reserve and Anonymity Discrepancy) were subjected to a multiple regression analysis, considering Privacy Preference as the dependent variable, and Discrepancy Index as the independent variable The results (Table 18) indicate that only Solitude Discrepancy emerged as a significant predictor of Solitude Preference (10% variance explained), Intimacy Preference (9% variance explained), and Anonymity Preference (6% variance explained) None of the other Discrepancy Indices significantly predicted any of the criterion variables Once again, Reserve Preference as a dependent variable did not come into the picture

With respect to the direction of the relationship between the Privacy Preference components and the Discrepancy Indices, contrary to the main hypothesis, the significant relationships were all positive rather than negative These included the relationship between Solitude Discrepancy and Solitude Preference, between Solitude Discrepancy and Intimacy Preference, and between Solitude Discrepancy and Anonymity Preference Thus it was the alternative hypothesis of a positive relationship that received support

Table 18

Privacy Preference and Discrepancy Indices: Multiple Regression Analysis
(Study 3· N = 70)

Independent variables (4) Discrepancy Indices
Dependent variables (4)· Privacy Preference components

Dependent Variable: Solitude Preference Score

Step	MultiR	Rsq	F(Eqn)	Sig.	Beta	Variables
1.	32	10	8 04	00	32	Solitude Index
			df(1,68)			

Dependent Variable. Intimacy Preference Score

Step	MultiR	Rsq	F(Eqn)	Sig	Beta	Variables
1.	.31	.09	7.43	.00	.31	Solitude Index
			df(1,68)			

Dependent Variable: Anonymity Preference Score

Step	MultiR	Rsq	F(Eqn)	Sig.	Beta	Variables
1.	.25	.06	4.36	03	25	Solitude Index
			df(1,68)			

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c) Discrepancy and Control The four Discrepancy Indices and 8 Control variables were subjected to a multiple regression analysis, considering Discrepancy Indices as the dependent variables, and the Control variables as the independent variables Overall, the results (Table 19) showed that most of the Control variables turned out to be significant predictors of the Discrepancy variables Moreover, both Regulation and Freedom components contributed to the explanation of the variance in the dependent variables Thus Anonymity and Intimacy Regulation, and similarly, Anonymity and Intimacy Freedom, significantly predicted Solitude Discrepancy (7%, 7%, 6% and 8% variance explained, respectively) In the case of Intimacy Discrepancy, again, the same Control variables emerged as significant predictors (8%, 8%, 7% and 6% variance explained, respectively) In the case of Anonymity Discrepancy, only Solitude Regulation was a significant predictor, explaining 6% of the variance Deviating from the findings pertaining to the other two relationships involving Privacy Preference, Reserve Discrepancy was predicted significantly by many of the Control variables These included Solitude, Intimacy and Anonymity Regulation (10%, 6%, and 9% variance explained, respectively) as well as Solitude and Intimacy Freedom (5% and 7% variance explained, respectively) In other words, the Control variables were significant predictors of the Discrepancy variables, including Reserve Discrepancy

With regard to the direction of the relationship between Discrepancy Index and Control, it was hypothesized that the

Table 19

Discrepancy Indices and Control: Multiple Regression Analysis Results
(Study 3: N = 70)

Independent Variables (8) = Control Components
Dependent Variables (4) = Discrepancy Indices

Dependent Variable: Solitude Discrepancy Index

Step	Multi R	RSquare	F	Sig. of F	df	Beta	Variable
1.	.27	.07	5.43	.02	1.68	-.27	Regulation over anonymity
2.	.38	.94	5.64	00	2.67	.26	Regulation over Intimacy
3.	.47	.22	6.32	00	3.66	-.35	Freedom over Intimacy
4.	.52	.28	6.25	00	4.65	.32	Freedom over Anonymity

Dependent Variable: Intimacy Discrepancy Index

Step	Multi R	RSquare	F	Sig. of F	df	Beta	Variable
1.	.29	.08	6.24	.01	1.68	-.29	Regulation over Anonymity
2.	.38	.15	5.82	.00	2.67	.25	Regulation over Intimacy
3.	.46	.22	6.09	.00	3.66	.36	Freedom over Anonymity
4.	.54	.29	6.79	.00	4.65	-.35	Freedom over Intimacy

Dependent Variable: Anonymity Discrepancy Index

Step	Multi R	RSquare	F	Sig. of F	df	Beta	Variable
1.	.24	.06	4.08	.04	2.68	-.23	Regulation over Solitude

Dependent Variable: Reserve Discrepancy Index

Step	Multi R	RSquare	F	Sig. of F	df	Beta	Variable
1.	.30	.09	6.94	.01	2.68	-.30	Regulation over Anonymity
2.	.39	.15	5.99	.00	3.67	.24	Regulation over Intimacy
3.	.47	.22	6.14	.00	4.66	-.32	Freedom over Intimacy
4.	.52	.27	5.94	.00	5.65	.26	Freedom over Solitude
5.	.61	.37	7.58	.00	6.64	-.43	Regulation over Solitude

overall relationship would be negative. The results indicated that out of the 14 significant relationships, 6 were positive and the remaining 8, negative The positive relationships included those between Intimacy Regulation and Solitude Discrepancy, between Intimacy Regulation and Intimacy Discrepancy, between Intimacy Regulation and Reserve Discrepancy, between Anonymity Freedom and Solitude Preference, between Anonymity Freedom and Intimacy Preference, and between Solitude Freedom and Reserve Discrepancy The negative relationships included those between Anonymity Regulation and Solitude Discrepancy, between Intimacy Freedom and Solitude Discrepancy, between Anonymity Regulation and Intimacy Discrepancy, between Intimacy Freedom and Intimacy Discrepancy, between Solitude Regulation and Anonymity Discrepancy, between Anonymity Regulation and Reserve Discrepancy, between Intimacy Freedom and Reserve Discrepancy, and between Solitude Regulation and Reserve Discrepancy In other words, the prediction of an overall negative relationship between the Discrepancy Indices and the Control variables was partially borne out The positive relationships (which were contrary to the expectations) were accounted for mainly by Intimacy Regulation and Anonymity Freedom, the negative relationships (which were consistent with expectations) were accounted for mainly by Intimacy Freedom, Anonymity Regulation, and Solitude Regulation

Discussion

The main questions raised in the present study pertained to the relationships between the three variables, namely, Privacy

Prefrence, Control over privacy, and Discrepancy between Desired and Actual Privacy One aspect of the present findings was that the four privacy components exhibited essentially the same pattern of Privacy Preference as that in Study 1, although two different inventories were used to measure the variables This supports the idea that Westin's conceptualization of four basic components or dimensions of privacy is robust, and is also found in a non-Western culture like India. Not only Privacy Preference and Desired Privacy, but also the pattern of the Privacy Control components indicated that control over the privacy components was perceived to be highest in the case of Intimacy and least in the case of Anonymity

A second aspect of the findings was that considering the Privacy Preference - Control relationship, in keeping with initial expectations, Control was found to be a fairly good predictor of Privacy Preference Of the two sets of Control items used in the present study, namely, Regulation and Freedom, the Freedom component was found to be a better overall predictor of Privacy Preference This finding can be considered partially consistent with Altman's (1975) view of control in defining privacy, which implies regulation in addition to freedom It is possible that in reality, it is control in the sense of choice and freedom, rather than regulation, which is related to Privacy Preference Regulation implies that means are actively adopted to maintain privacy, and this may not be easy in Indian settings, yet the feeling of freedom or choice may be experienced with respect to some forms of privacy In other words, the stronger effect of Freedom than Regulation in the Privacy Preference-

Control relationship may suggest that the sense of control in the present sample was cognitive (that is, a sense of freedom) rather than behavioural (that is, regulatory) (Averill, 1973; Schmidt & Keating, 1979)

Thirdly, with regard to the relationship between Privacy Preference and Discrepancy, the obtained relationship was relatively unambiguous Contrary to the main expectation, this relationship was found to be positive rather than negative. That is, the greater the Discrepancy in Desired/Actual Privacy, the greater the Privacy Preference However, among the four Privacy components, only Solitude Discrepancy was found to be a significant predictor, and it predicted three of the four components of Privacy Preference The findings indicated that the greater the discrepancy between Desired and Actual Solitude, the greater the preference for the Solitude, Intimacy and Anonymity components of privacy This finding fits in with the general finding throughout the present research that Solitude and Intimacy, as primary components of privacy, were more important to the Indian respondents than Reserve and Anonymity. Therefore, if the desired solitude is not available, the preference for solitude as well as other forms of privacy increases This positive relationship supports the notion of psychological reactance (Brehm, 1966), associated with lack or loss of control and freedom what is perceived to be unavailable is also seen to be more attractive The finding that this relationship applies to Anonymity (in addition to Solitude and Intimacy) is reminiscent of a suggestion made in the case of Study 1 there

may be some common features underlying Solitude and Anonymity as individual states of privacy (Proshansky et al. 1970). In the present findings, Reserve as a component of Privacy is not highlighted, which is a further confirmation of the finding (in Study 1) that Reserve is a relatively unimportant form of privacy for the present Indian sample

Fourthly, with regard to Discrepancy between Desired and Actual Privacy, it is clear that (i) most subjects mentioned that they actually had less of all forms of privacy than they desired, (ii) the highest desired privacy was in the case of Intimacy, followed by Solitude, and the lowest desired privacy was in the case of Anonymity, and (ii) the magnitude of Discrepancy between Desired and Actual privacy, while not appreciably different for the various Privacy components, tended to be highest for Solitude and Anonymity, and lowest for Intimacy. Taken together with the findings of the present study pertaining to Privacy Preference and Control (described above), both of these aspects related to Discrepancy reflect specific Indian socio-cultural characteristics Space scarcity and social requirements would account for the general Desired > Actual Privacy direction of discrepancy A higher desired level of Intimacy as well as Solitude, and a lower desired level of Anonymity, illustrates the affiliative and collectivist features (encouraging Intimacy) of the Indian culture, combined with the contemplative attitude that it encourages (suggesting Solitude).

Fifthly, the relationship between Control and Discrepancy was significant The expectation of an overall negative relationship between these two variables was not entirely

supported by the results; however, the pattern of positive and negative relationships was sufficiently consistent to present a definite picture Intimacy Freedom, Anonymity Regulation and Solitude Regulation as components of Control were negatively related to some of the Discrepancy variables, Intimacy Regulation and Anonymity Freedom were positively related to the Discrepancy variables This finding has at least two implications: one, that Control is significantly related to the Discrepancy between Desired and Actual Privacy, and two, that the Regulation and Freedom components of Control, although inter-related, have dissimilar relationships with Discrepancy variables.

Considering the total picture given by the findings of the present study, it can be concluded that a) the sense of control did appear as a correlate of privacy preference, although the relationship may not be equally strong in the case of all the components of privacy, b) discrepancy between desired and actual privacy was related to privacy preference, but only in the case of solitude discrepancy, and c) the sense of control was significantly related to the discrepancy between desired and actual privacy

Putting the findings of this study in the context of other findings related to control, it may be said that the present study was the first step towards opening up the possibility of control being a significant external correlate of privacy preference To that extent, the finding generally corroborates the earlier empirical findings pertaining to control in the context of crowding and personal space For example, the

positive relationship between Control and Privacy Preference is generally consistent with the negative relationship between perceived control and perceived crowding, reported in a study of Indian households (Ruback & Pandey, 1991).

As in the case of the first two studies, one of the shortcomings of Study 3 is that it did not yield direct information regarding the mediating variables in any of the relationships For example, it is possible that a sense of control is a significant correlate of privacy preference because a discrepancy is experienced between desired and actual privacy. In addition, variables such as affiliativeness, and the family structure (nuclear or extended family), might mediate the Control/Privacy Preference relationship On one hand, the presence of more members in the household (as in the case of extended families) might decrease the sense of control over privacy (especially Solitude and Reserve) but might also increase the preference for other forms of privacy, such as Intimacy (associated with affiliativeness). A finer analysis of these inter-relationships is urgently needed

In summary, the present study provided empirical information on two psychological correlates of privacy that have not been examined before, at least in the Indian context These findings may serve as guidelines for further research on other correlates of privacy

Chapter 5

Privacy, Seating Preference, Control and People-Environment Relationship: Summary, Conclusions and Implications

The preceding four chapters in the present volume described three studies that investigated certain aspects of privacy in an Indian context

Rationale for the Present Research

Beginning with a discussion of the conceptualization of privacy in the existing research literature, the empirical investigations of correlates of privacy were reviewed In addition, findings of studies pertaining to the related concepts of territoriality, personal space and crowding were briefly described A survey of this research revealed that

(1) privacy has been conceptualized in a multi-dimensional way, but there have been very few attempts to empirically validate these conceptualizations,

(2) there is relatively little empirical research on the correlates and determinants of privacy, and not a single study of privacy in the Indian context,

(3) privacy resembles the concepts of territoriality, personal space and crowding in several ways, but also seems to have its own distinct psychological aspects which need investigation, and

(4) considering the whole area of privacy and related concepts, several questions emerge that, when examined, would contribute empirically, theoretically, and methodologically to the existing research

Scheme and Conceptual Framework of the Research

On the rationale described above, specific questions were taken up for research, considering Privacy Preference as the major dependent variable. These questions were presented in a general scheme (Figure 1, page 27), incorporating three major correlates and determinants of Privacy Preference, namely, (a) a philosophical aspect, indicated by the People-Environment Relationship (PER) view proposed by Stokols (1990), (b) a physical-spatial aspect, namely, partitions, (c) a situational aspect, namely, the number of persons, and (d) a psychological aspect, represented by two variables, namely, a sense of control over privacy, and the discrepancy between desired and actual privacy

The theoretical or conceptual framework adopted in the present research included (1) Westin's (1967) conceptualization of privacy, consisting of four dimensions or components of privacy, namely, Solitude, Intimacy, Reserve and Anonymity,
(2) Altman's (1975) conceptualization that highlights the role of control or choice in privacy,
(3) Stokols' (1990) view of the People-Environment Relationship (PER), as a possible correlate of privacy preference, and
(4) certain socio-cultural characteristics of the Indian society, namely, collectivism, emphasis on developing a contemplative attitude, and scarcity of space

Other concepts that could be used for explanation were related to earlier research on personal space and crowding.

Three studies were conducted

Study 1, a correlational study, examined the role played by the People-Environment Relationship (PER) view in Privacy Preference. The two variables, namely, Privacy Preference and PER view, were measured with the help of inventories specifically designed for the purpose of the study

Studies 2A and 2B, both experimental studies, examined the effect of partitions and the number of persons on Privacy Preference, as indicated by seating preference and seat placement/ partition preference In Study 2A, the effect of (i) the presence or absence of partitions between the superior and co-workers, and between co-workers, and (ii) the number of persons, on seating preference, was investigated through paper-and-pencil measures diagrams depicting different seat positions were presented, and subjects were asked to rate their preference for these seat positions. In Study 2B, the effect of number of persons on seat placement and partition preference (between co-workers) was investigated with the help of a projective-type procedure subjects were given the floor-plan of an office, and asked to place miniature cardboard chairs and tables, as well as partitions (if they wished) in the positions of their choice in the floor-plan

Study 3, a correlational study, examined the relationship between Privacy Preference, Control over Privacy, and the Discrepancy between Desired and Actual Privacy All three variables were measured with the help of inventories (a second Privacy Preference Scale was used in this study)

Summary of the Findings of the Present Research

The specific research questions examined in each study, along with the answers obtained, are briefly summarized below

Study 1 examined the following: 1) The concept of privacy among Indians (as members of a non-Western culture), the components of privacy in the Indian context, and differences, if any, from those proposed by some Western researchers, 2) the concept and components of a philosophical aspect, namely, PER view (Stokols, 1990) among Indian subjects, and 3) the relationship between Privacy Preference and the PER view

The findings indicated that (1) Urban Indian adults understand the meaning of privacy primarily as solitude and remaining undisturbed - in other words, being away from others, with themselves - and to some extent, as having choice or freedom in their interactions with others

(2) A factor analysis of their responses to the relevant items showed that the urban Indian subjects conceptualize privacy in terms of three components, namely, Solitude combined with Intimacy, Reserve and Anonymity These three components are strikingly similar to the four components (dimensions) proposed by Westin (1967), namely, Solitude, Intimacy, Reserve and Anonymity The difference is that among Indians, Solitude and Intimacy are seen as a combined dimension This is attributed to some core Indian cultural characteristics On one hand, there is an emphasis on the individual developing a contemplative, spiritual attitude which implies being away from others On the other, there is a strong tendency to maintain interpersonal and

small-group (community) ties that define the collectivist features (Hofstede, 1980) of Indian society Solitude represents the effect of the first characteristic, and Intimacy, that of the second

(3) In terms of Privacy Preference, the most preferred form of privacy was Solitude/Intimacy, and the least preferred, Anonymity, with Reserve receiving intermediate preference Moreover, among urban respondents, Reserve and Anonymity were also described as the least familiar forms of privacy, rural respondents expressed total unfamiliarity with these two forms of privacy

(4) With respect to the concept of the environment, and the People-Environment Relationship view, the environment was mainly described in terms of the natural and physical environment, and to some extent, included human beings. The environment was considered very important primarily because it provides resources, an attitude that reflects utilitarianism, or, in Stokols' view, an instrumental view Further examination through factor analysis indicated that the PER view of the Indian subjects is constituted of four factors, namely, Utilitarian Attitude, Interactiveness/Symbiosis, Negative Orientation, and Spiritualism These components of the PER did deviate somewhat from those proposed theoretically by Stokols (1990), namely, the minimalist, instrumental, and spiritual views Utilitarian Attitude predominantly reflected the thinking that the environment exists as an entity separate from the human being, but acts as a provider of resources, people can make use of these resources, being aware of the person-environment interdependence

This factor included elements of Stokols' minimalist and instrumental views, and also of symbiosis (a component incorporated into the PER view by the present author) Interactiveness/Symbiosis predominantly indicated the person-environment interdependence aspect, and was constituted of minimalist, spiritualist and symbiotic elements Negative Orientation illustrated an overall negative attitude towards the PER, endorsement of this factor implied negation of the spiritual aspects of the environment, and of the importance of the environment for any purpose other than utilitarian ones This factor included largely the minimalist element, and some elements of the instrumental and spiritual (negatively loaded) views Finally, Spiritualism reflected largely the supernatural qualities attributed to the environment, and the spiritual relationship between the person and the environment This factor included mainly the spiritual component and some element of the minimalist (negatively loaded) view In other words, although some aspects of Stokols's PER view conceptualization were found among the Indian respondents, their emphases seemed to differ from Stokols' view

(5) Agreement with the components of PER view was strongest in the case of Utilitarian Attitude and Spiritualism, less in the case of Interactiveness/Symbiosis, and least in the case of Negative Orientation This pattern of endorsement was consistent with two co-existing characteristics of the Indian culture, namely, scarcity (which fosters a Utilitarian Attitude) and a pervasive spiritual tradition (which fosters a Spiritualist

attitude)

(6) With regard to Privacy Preference and the PER view, some relationship was expected in the light of the consistent theme of person-nature harmony in the religious-spiritual background of the Indian culture, and in view of privacy as a response to the environment A multiple regression analysis revealed that (a) Spiritualism, Interactiveness/ Symbiosis and Negative Orientation were significant predictors of all three Privacy factors, with Spiritualism emerging as the strongest predictor, and Solitude/Intimacy, the best predicted criterion, (b) as expected, Spiritualism was positively related to Solitude/ Intimacy, and Interactiveness/ Symbiosis was negatively related to Reserve However, Interactiveness/ Symbiosis was negatively related to Solitude/ Intimacy, which was contrary to expectations Spiritualism was also positively related to Anonymity, and Negative Orientation was negatively related to Anonymity This suggested that there may be a common element underlying Solitude and Anonymity, which is positively associated with Spiritualism and negatively associated with Negative Orientation Finally, Utilitarian Attitude, the PER view factor with which there was maximum agreement, did not significantly predict any of the Privacy factors. This demonstrates that although the instrumental value of the environment was salient in the respondents' perception, this component was not significantly related to any form of privacy preference

In general, the expectation of a relationship between Privacy Preference and the PER view was borne out by the findings

Study 2A and Study 2B examined the effect of a physical-spatial variable (partitions) and a situational variable (the number of persons) on privacy preference as indicated by seating preference, seat placement and partition preference

In Study 2A the following specific questions was examined

In the context of an office setting, what would be the effect of a) a partition between a superior and the co-workers, b) partitions between the co-workers, c) varying seat positions, and d) the number of persons (3, 4, 5 and 6), on privacy preference, as indicated by seating preference ?

An analysis of the preference ratings for various seats showed that (1) Seat Position had a significant main effect on seating preference As predicted, in all conditions, the seat(s) farthest from the superior was (were) preferred the most This indicated a preference for privacy (solitude) and also a status effect (the maintenance of distance from the superior) The least preferred seats were the ones closest to the superior, in the 3- and 4-person conditions, and the ones between the front and back seats, in the 5- and 6-person conditions.

(2) Neither Partition/No partition between the superior and the co-workers, nor Partition/ No partition between the co-workers had a significant effect on seating preference. This was contrary to expectations

(3) There was no significant difference in the magnitude of seating preference between the 3-, 4-, 5- and 6-person conditions, contrary to expectations In fact, the magnitude of preference for the farthest seat(s) tended to decrease rather

than increase from the 3-person to the 6-person condition.
(4) A significant interaction in the 6-person condition between the two Partition variables and Seat Position suggested that Partition did have some effect depending on the number of persons

Although the seating preference differences with respect to Seat Position were in accordance with the preference for privacy (solitude), the effect of status, and crowding, the absence of other significant effects called for an explanation. It was felt that this could be due to procedural or methodological aspects of Study 2A In order to verify this possibility, Study 2B was conducted with a modified procedure
In Study 2B, the main question to be answered was In the context of an office setting, what is the effect of the number of persons (6 or 10) on privacy preference, indicated by (a) seat placement and (b) partition preference ?

A comparison of seat placement patterns and the frequency of partition preference between the 6-person and 10-person conditons revealed that (1) Subjects consistently chose a 'private' seat for themselves (that is, a corner seat, a seat placed alongside the wall, or a seat that was comfortably distant from a co-worker and the superior) They placed the co-worker seats symmetrically along the walls with space between them, and an open space in the center
(2) As in the case of Study 2A, the number of persons did not significantly affect Seat Placement The seat placement pattern was similar between the 6- and 10-person conditions So were the reasons given for the pattern (namely, working undisturbed, being

able to watch others, and leaving space in the center of the room for easy movement)

(3) In the case of partition preference, as expected, subjects preferred partitions with a significantly greater likelihood in the 10-person condition than in the 6-person condition. This was consistent with predictions based on privacy as well as crowding

In short, in both Studies 2A and 2B, the expected effect of the number of persons on seating preference and seat placement was not found However, there were clear indications of a preference for privacy (solitude) regardless of the number of persons Moreover, privacy preference demonstrated through a choice of partitions was stronger when more persons were present than in the case of fewer persons Possibly certain procedural features of the two studies obliterated the rather obvious effect of the number of persons It is also possible that the absence of a significant effect of the number of persons underlines a distinction between crowding and privacy Whereas the former is defined in terms of the number of persons present, the latter might not use this variable as a defining criterion The absence of a clear effect of partitions on seating preference was not quite consistent with earlier findings that showed positive effects of barriers such as partitions on privacy

Study 3 examined the relationship between Privacy Preference, the sense of Control over privacy, and the Discrepancy between Desired and Actual Privacy. All three variables were measured with the help of inventories

The main results were as follows. (1) Among the four components of Privacy Preference, the highest preference was shown for Intimacy, followed by Reserve, lower preference was shown for Solitude, and least for Anonymity. This pattern was very similar to that found in Study 1, in that there also the highest preference was shown for Solitude/Intimacy and least, for Anonymity, but was different to the extent that in Study 3, Solitude Preference was much lower than Intimacy Preference.

(2) Considering Control over privacy, the magnitude of Intimacy Control was perceived to be the highest, followed by Solitude Control, and then by Reserve Control Anonymity Control was perceived to have the lowest magnitude If a positive relationship is assumed between Privacy Preference and Control, then this pattern of Control over privacy is consistent with the preference pattern shown in Study 1, and to a fair extent, with that shown in the same study (Study 3)

(3) In the case of Desired/Actual Privacy, Desired Intimacy and Desired Solitude had the highest magnitude, followed by Desired Reserve, Desired Anonymity had the lowest magnitude The levels of Actual Privacy were also in the same direction but were lower than that of Desired Privacy in the case of all four components.

(4) Considering the Discrepancy between Desired and Actual Privacy, the majority of the subjects indicated, as expected, that their Desired Privacy was greater than their Actual Privacy A comparison of the Discrepancy Indices across the four components showed that the mean Discrepancy Index was highest in the case of Solitude, very closely followed by Anonymity, was lower for Reserve, and lowest for Intimacy. In other words, most

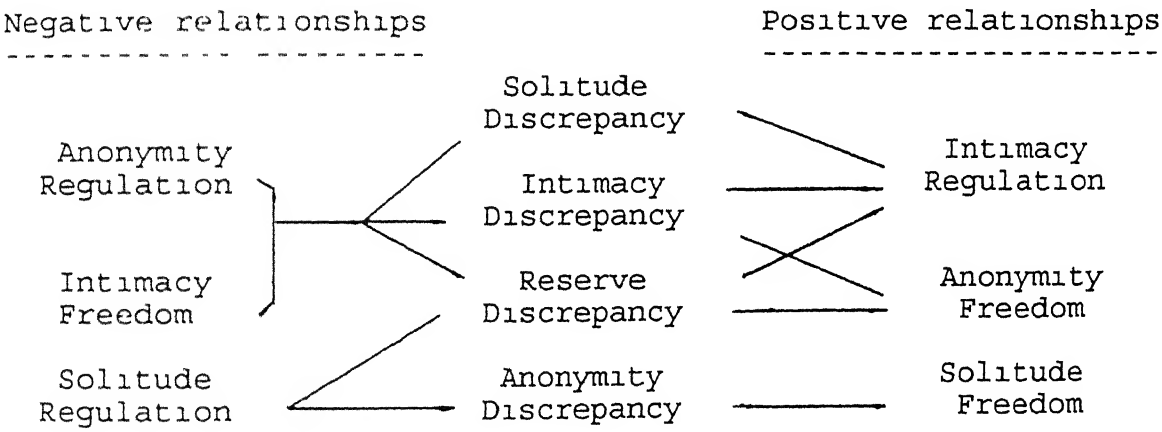
of the respondents felt that they were actually getting much less than their desired level of Solitude and Anonymity, whereas the corresponding difference was perceived to be less in the case of Reserve and Intimacy

(5) Considering the relationships between the three variables, a multiple regression analysis indicated that (a) with regard to Privacy Preference and Control, Intimacy Regulation, and Solitude Freedom were positively related to Intimacy Preference, similarly, Solitude Freedom was positively related to Anonymity Preference However, Intimacy Freedom was negatively related to Solitude Preference, and to Anonymity Preference, similarly, Anonymity Freedom was negatively related to Intimacy Preference This finding demonstrated that, as hypothesized, Privacy Preference was significantly related to Control over Privacy, but the expected overall positive relationship between the two variables was only partially supported. In general, Intimacy Preference was the best predicted Privacy Preference component, between Freedom and Regulation as components of Control, Freedom was a better predictor of Privacy Preference,

(b) with respect to Discrepancy between Desired/Actual Privacy and Privacy Preference, only Solitude Discrepancy turned out to be a significant predictor of Solitude, Intimacy and Anonymity Preference Contrary to the expected overall negative relationship between these two variables, all relationships were positive This finding supported the explanation that because of psychological reactance (Brehm, 1966), the larger the discrepancy between the desired and actual levels of privacy (that is, the

more unavailable the desired privacy), the more attractive privacy seems to be, and therefore, the greater the expressed privacy preference,

c) with regard to Discrepancy and Control, as expected, a significant relationship was found between the two variables All Control variables (except Reserve Control) significantly predicted one or more of the Discrepancy components. The overall relationship was expected to be negative. However, the results showed that although most of the relationships were negative, there were also several that were positive, as listed below:



The consistent features of this relationship were as follows (i) Intimacy and Anonymity Control significantly predicted more of the Discrepancy components than Solitude Control, (ii) Reserve Discrepancy was significantly predicted by several of the Control variables, and (iii) most of the negative relationships involved the Regulation component of Control, and most of the positive relationships, the Freedom component

Conclusions

In the light of the findings summarized above, the following general conclusions may be drawn·

1 The concept of Privacy among urban Indian adults is very similar to the concept of privacy found in Western cultures. In general, Privacy in the present research was found to consist of three major components, namely, a combined Solitude/Intimacy component, Reserve and Anonymity (indicated in Study 1) These three components very closely resemble the four dimensions proposed by Westin (1967), namely, Solitude, Intimacy, Reserve and Anonymity This similarity can be taken as support for Altman's (1977) contention that privacy has a culturally universal base The difference, namely, that a combined Solitude/Intimacy component was found in the present Indian sample, can be explained in terms of specific socio-cultural characteristics In Indian philosophy, the individual is perceived as being an inherent part of an interpersonal or small-group unit, and the community is seen as an extension of the individual (Sinha, 1984) Possibly, it is this individual-small group merging that results in the combined Solitude/Intimacy component of privacy among Indians.

2 In terms of Privacy Preference, the overall preference indicated by the samples studied in the present research (Studies 1 and 3) was consistently the highest for Solitude/Intimacy (or separately for the two kinds of Privacy), followed by Reserve, the preference was lowest for Anonymity These consistent results (among the urban respondents) were found even when two different inventories were used to measure Privacy Preference Additional information provided by the Privacy Control Scale and the Desired/Actual Privacy Scale (Study 3) also

revealed the same general pattern of privacy preference.

3 As a philosophical aspect, the People-Environment Relationship, or PER view (Stokols, 1990) emerged as a significant correlate of Privacy Preference, in the present Indian sample Specifically, the positive relationship between the Spiritualism component of the PER view, and Solitude/Intimacy and Anonymity Preference, the negative relationship between Interactiveness/Symbiosis, and Reserve and Solitude/Intimacy Preference, and the negative relationship between Negative Orientation, and Anonymity Preference, could be explained in terms of certain characteristics of the Indian culture. These were the inculcation of a religious-spiritual attitude towards the environment (including human beings) that encourages contemplation and being away from social interaction, and an attitude of collectivism and interpersonal harmony towards human beings The former would lead to a preference for solitude and anonymity, and the latter, to a preference for intimacy. Scarcity characteristics of the Indian culture encourage an instrumental or utilitarian attitude towards the environment (combined with a sense of person-environment symbiosis or interdependence), however, this utilitarian view is not significantly related to privacy preference Besides, the positive relationship between Spiritualism and Anonymity, and the negative relationship between Negative Orientation and Anonymity, suggests the possibility of a common element between Solitude and Anonymity as privacy components This idea is consistent with the description of the two components as examples of individual (versus group) states of privacy (Proshansky et al. 1970)

4 The effect of a physical-spatial determinant (namely, partitions) and a situational determinant (namely, the number of persons) on privacy preference in an office setting, indicated through seating preference was non-significant Partition preference was significantly influenced by the number of persons In general, there was a clear preference for privacy (solitude) both in seating preference and seat placement The non-significant effect of number of persons on seating preference is inconsistent with some earlier findings on crowding in Indian settings (Jain, 1987), and can be attributed to methodological aspects of the present studies It may also indicate that privacy mechanisms differ from the mechanisms used by individuals in crowding

5 Control over privacy was a significant psychological correlate of Privacy Preference Freedom rather than Regulation, as a component of Control, was more closely and positively related to Privacy Preference Intimacy Preference was the best predicted component of Privacy Preference.

6 Discrepancy between Desired and Actual Privacy was positively related to Privacy Preference Solitude Discrepancy was the sole predictor of three out of four Privacy Preference components This finding was taken as evidence of psychological reactance (Brehm, 1966) the more unavailable privacy seemed to be (as indicated by a large desired/actual discrepancy), the more privacy was preferred

7 Discrepancy and Control were significantly related, but this relationship was positive or negative depending on both the

specific Discrepancy and Control component

In summary, it could be concluded that both psychological variables, namely, Control over the four Privacy components, and Discrepancy between the Desired and Actual Privacy in the four components, were significantly related to Privacy Preference

Implications, Contributions and Issues for Further Research

The present research findings should be assessed keeping in view the fact that privacy research has only recently commenced, and these three studies are the very first Indian investigations in this area The implications of the present findings can be understood by considering a) the possible contributions made, and b) the unaswered issues posed for further research

Contributions

The present research findings contribute in the following ways to the existing body of research on privacy

1) They provide empirical information in a totally unexplored field with respect to the Indian culture As was mentioned at the outset, although there is systematic empirical research in the area of crowding, there is absolutely no empirical information related to privacy, in the Indian context

2) The findings make a theoretical contribution by providing specific information regarding

(i) the components of Privacy, which were found to be essentially similar to the components proposed in the context of Western cultures,

(ii) the preference pattern for the different forms of privacy,

(iii) a philosophical aspect, namely, the role played by the PER

view in privacy preference: this aspect does not seem to have been examined before, and will enrich the existing conceptualizations of privacy,

(iv) the effect of a physical-spatial and a situational determinant of privacy preference: the findings suggested that privacy maintenance mechanisms may be different from those in the case of crowding, and

(v) the significance of the sense of control over privacy, and the discrepancy between desired and actual privacy as correlates of privacy preference the findings corroborated the significant role played by other forms of control in related areas such as territoriality, personal space and crowding (Ruback & Pandey, 1991) Altman's (1975) proposal of a component of control in privacy, in the form of choice or freedom in selecting interaction, seems to be upheld

3) The present research makes methodological contributions, in the form of inventories for the measurement of privacy and privacy preference, and some of their correlates, namely, the People-Environment Relationship view, Privacy Control and Desired/Actual Privacy Although the construction of standardized tools was not one of the aims of the present research, such tools have now become available, and with some refinement, they can be used for further research on privacy Besides, in the two experimental studies, non-inventory-type indicators of privacy preference were used, namely, seating preference and seat/ partition placement These procedures were not new and have been used before in Western studies (Kuethe, 1962, Little, 1965, Sommer, 1969), however, the present research demonstrates that

such procedures can yield useful information that would not be forthcoming by the use of the conventional inventory. In addition, the present research included both urban and rural samples (the latter provided valuable conceptual information regarding privacy).

Issues for Further Research

Some of the limitations of the present research stemmed from practical difficulties, but others may pose more theoretical or conceptual questions. Among the more important unanswered questions that need to be addressed, the following may be mentioned:

a) In order to present an integrated picture including the inter-relationships between the variables examined in the present research, an intensive study of the mediating variables is required. The present findings do illustrate the nature of the relationships between Privacy Preference, on one hand, and the PER view, partitions, the number of persons, Control over Privacy, and Discrepancy between Desired and Actual Privacy, on the other. This is undoubtedly an important first step, however, more detailed information on the explanation of the relationships is required.

b) More conceptualizations of privacy (for example, its biological roots, and its communication aspects) need to be empirically examined and strengthened.

c) Additional physical-spatial and situational determinants should be examined, preferably in real-life settings, using behavioural and performance measures. This would facilitate the

application of research findings to real life. Moreover, research in this direction will enrich the Indian traditional ideas related to architecture and urban planning (Director of Town Planning, Hyderabad, 1972) In addition, the ambiguous effects of partitions and the number of persons found in the present research should be re-examined, along with the possibility that privacy is a different mechanism from other related concepts, such as crowding

d) The role of personality and other psychological correlates of privacy requires more attention For instance, variables such as anxiety, self esteem and introversion-extraversion need to be examined more closely.

e) The cross-cultural generality of the present findings, as well as of other correlates of privacy, requires verification through systematic cross-cultural comparisons Specific issues such as the incompatible effects of cultural collectivism and individualism on privacy preference, or those of social facilitation and privacy, should also be examined in a cultural perspective

As a final note, it may be added that despite its conceptual and procedural limitations, the present research has opened up several possibilities in a relatively unexplored area of social and environmental psychology The findings can be considered the starting point and a stepping stone for anyone who is interested in privacy as an academic, social or personal topic

BIBLIOGRAPHY

Aiello, J R , Baum, A., & Gormley, F.B. (1981) Social determinants of residential crowding stress. Personality and Social Psychology Bulletin, 7, 643-649

Aiello, J R , & Cooper, R E (1972) . The use of personal space as a function of social affect Proceedings of the Annual Convention of the American Psychological Association, 7, 207-208

Aiello, J R , Epstein, Y M , & Karlin, R.A. (1975). Field experimental research on human crowding Paper presented at the annual meeting of the American Psychological Association, New York

Aiello, J R & Jones, S E (1971) . Field study of the proxemic behaviour of young school children in the three sub-culture groups Journal of Personality and Social Psychology, 19, 351-356

Aiello, J R & Thompson, D E (1980) . Personal space, crowding and spatial behaviour in a cultural context In I.Altman and J F Wohlwill (Eds), Environment and Culture, New York Plenum Press

Aiello, J R , Vautier, J S , & Bernstein, M D (1983) Crowding stress Impact of social support, group formation and control. Paper presented at the Annual meeting of the American Psychological Association, Anaheim, CA.

Altman, I (1974) Privacy A conceptual analysis In D H Carson (Ed), Man-environment interactions Evaluations and applications. Washington, D.C : Environmental Design Research Association

Altman, I (1975). The environment and social behaviour: Privacy, personal space, territoriality and crowding. Monterey, CA Brooks/Cole

Altman, I. (1977) Privacy regulation Culturally universal or culturally specific? Journal of Social Issues, 33 (3), 66-84

Altman, I , & Chemers, M (1980) . Culture and environment Monterey, CA Brooks/Cole.

Altman, I & Rogoff, B (1987). World views in psychology Trait, interactional, organismic, and transactional perspectives In D Stokols & I Altman (Eds), Handbook of environmental psychology. New York.Wiley, 7-40

Archea, J (1977) The place of architectural factors in behavioral theories of privacy Journal of Social Issues, 33 (3), 116-137

Averill, J R (1973) Personal control over aversive stimuli and its relationship to stress. Psychological Bulletin, 80, 286-303

Bailey, K , Harnett, J , & Gibson, S (1972). Implied threat and the territorial factor in personal space Psychological Reports, 30, 263-270

Barker, R G (1968) Ecological psychology Concepts and methods for studying the environment of human behaviour. Stanford, CA Stanford University Press

Baron, R M , & Rodin, J (1978) Personal control as a mediator of crowding In A Baum, J E Singer & S.Valins (Eds.), Advances in environmental psychology (Vol 1). Hillsdale, NJ Erlbaum

Bass, B M , & Klubeck, S (1952) Effects of seating arrangement on leaderless group discussions. Journal of Abnormal and Social Psychology, 47, 724-727

Baum, A , & Davis, G E (1974) Spatial and social aspects of crowding perception Unpublished manuscript, Department of Psychology, State University of New York at Stony Brook

Baum, A , & Davis, G E (1976) Spatial and social aspects of crowding perception Environment and Behaviour, 8, 527-544

Baum, A , Davis, G E , & Valins, S (1979) Generating behavioral data for the design process In J R Aiello and A Baum (Eds), Residential crowding and design New York Plenum Press

Bavelas, A (1950) Communication patterns in task-oriented groups Journal of the Acoustical Society of America, 22, 725-730

Baxter, J C (1970) Interpersonal spacing in natural settings Sociometry, 33, 444-456

Brehm, J W (1966) A theory of psychological reactance New York Academic Press

Brower, S (1981) Innovation proposal for Harlem Park inner block parks management (Technical Report). Baltimore City Planning Department.

Brown, B B , & Altman, I. (1983) Territoriality, defensible space and residential burglary Journal of Environmental Psychology, 3, 203-220

Calhoun, J B (1962) Population density and social pathology Scientific American, 206, 139-148

Chaikin, A L , Derlega, V J , & Miller, S.J. (1976). Effects of room environment on self-disclosure in a counseling analogue Journal of Counseling Psychology, 23, 479-481

Cohen, J L , Sladen, B , & Bennett, B. (1975). The effects of situational variables on judgements of crowding Sociometry, 38, 273-281

Cook, M (1970) Experiments on orientation and proxemics Human Relations, 23, 61-76

Dabbs, J M , Fuller, J P , & Carr, T S. (1973) Personal space when "cornered" College students and prison inmates Proceedings, 81st Annual Convention, American Psychological Association, 8, 213-214

Derlega, V J , & Chaikin, A L. (1977). Privacy and self-disclosure in social relationships. Journal of Social Issues, 33 (3), 102-115

Desor, J A (1972) Towards a psychological theory of crowding Journal of Personality and Social Psychology, 21, 79-83.

Director of Town Planning (1972) Building regulations for happy and healthy living Hyderabad Director of Town Planning, Government of Andhra Pradesh India

Edney, J J (1974) Human territoriality Psychological Bulletin, 81, 959 975

Edney, J J (1975). Territoriality and control: A field experiment Journal of Personality and Social Psychology, 6, 1108-1115

Edney, J J , & Buda, M A (1976) Distinguishing territoriality and privacy Two studies. Human Ecology, 4, 283-296.

Epstein, Y M , & Karlin, R A (1975) Effects of acute experimental crowding Journal of Applied Social Psychology, 5, 34-53

Esser, A H , Chamberlain, A S , Chapple, E D., & Kline, N S (1964) Territoriality of patients on a research ward. In J Wortis (Ed), Recent advances in biological psychiatry, New York Plenum Press pp 37-44

Evans, G W., & Howard, R B (1973) Personal space Psychological Bulletin, 80, 334-344

Festinger, L (1957) A theory of cognitive dissonance. Stanford, CA· Stanford University Press.

Firestone, I J , Lichtman, C M , & Evans, J R. (1980) Privacy and solidarity· Effects of nursing home accomodation on environmental perception and sociability preferences. International Journal of Aging and Human Development, 11, 229-241

Forston, R F , & Larson, C U (1968) The dynamics of space An experimental study in proxemic behavior among Latin Americans and North Americans Journal of Communication, 18, 109-116

Freedman, J L , Levy, A S , Buchanan, R.W., & Price, J (1972). Crowding and human aggressiveness. Journal of Experimental Social Psychology, 8, 528-548

Gibson, J J (1966) The senses considered as perceptual systems Boston, Massachusetts Houghton, Mifflin.

Gifford, R (1982) Projected interpersonal distance and orientation choices personality, sex and social situation Social Psychology Quarterly, 45, 145-152.

Gifford, R (1987) Environmental psychology· Principles and practice, Newton, Mass Allyn Bacon, Inc

Goffman, E (1963) Stigma. Notes on the management of spoiled identity Englewood Cliffs, N.J : Prentice-Hall

Greenbaum, P E , & Greenbaum, S D. (1981). Territorial personalization Group identity and social interaction in a Slavic-American neighbourhood Environment and behaviour, 13, 574-589

Guardo, C J , & Meisels, M (1971). Child-parent spatial patterns under praise and reproof Developmental Psychology, 5, 365

Hall, E T (1959) The silent language. Garden City, NY Doubleday

Hall, E T (1966) The hidden dimension Garden City, NY Doubleday

Hayduk, L A (1978) Personal space An evaluative and orienting overview Psychological Bulletin, 85, 117-134

Hayduk, L A (1981) The shape of personal space An empirical investigation Canadian Journal of Behavioral Science, 13,87-93

Hayduk, L A (1983) Personal space. Where we now stand Psychological Bulletin, 94, 293-335

Hayduk, L A (1985) Personal space. The conceptual and measurement implications of structural equation models Canadian Journal of Behavioral Science, 17, 140-149

Heshka, S , & Nelson, Y (1972). Interpersonal speaking distance as a function of age, sex and relationship Sociometry, 35, 491-498

Hofstede, G (1980) Culture's consequences: International differences in work-related values, Beverly Hills, California Sage

Horowitz, M J , Duff, D F , & Stratton, L O. (1964) Body-buffer zone Exploration of personal space Archives of General Psychology, 11, 651-656.

Iwata, O (1980). Territoriality orientation, privacy orientation and locus of control as determinants of the perception of crowding Japanese Psychological Research, 22, 13-21

Jain, U (1987) The psychological consequences of crowding. Sage Publications, New Delhi

Jones, E E , & Archer, R L (1976) Are there special effects of personalistic self-disclosure? Journal of Experimental Social Psychology, 12, 180-193.

Jourard, S M (1966) Some psychological aspects of privacy Law and Contemporary problems, 31, 307-318.

Karabenick, S, & Meisels, M (1972) Effects of performance evaluation on interpersonal distance Journal of Personality, 40, 275-286

Kelvin, P (1973) A social-psychological examination of privacy British Journal of Social and Clinical Psychology, 12, 248-261

Klopfer, P H , & Rubenstein, D I (1977) The concept privacy and its biological basis Journal of Social Issues, 33 (3), 52-65

Kuethe, J L (1962) Social schemas Journal of Abnormal and Social Psychology, 64, 31-38

Kuethe, J L , & Weingartner, H (1964) Male-female schemata of homosexual and non-homosexual penitentiary inmates Journal of Personality, 32, 23-31

Langer, E J , & Saegert, S (1977) Crowding and cognitive control Journal of Personality and Social Psychology, 35, 175-182

Laufer, R S , & Wolfe, M (1977) Privacy as a concept and a social issue A multidimensional development theory Journal of Social Issues, 33 (3), 22-42

Leavitt, H J (1951) Some effects of certain communication patterns on group performance. Journal of Abnormal and Social Psychology, 46, 38-50

Ley, D , & Cybriwsky, R (1974) The spatial ecology of stripped cars Environment and behaviour, 6, 53-68

Little, K B (1965) Personal space Journal of Experimental Social Psychology, 1, 237-247

Lott, B S , & Sommer, R (1967). Seating arrangements and status Journal of Personality and Social Psychology, 7, 90-95

Luft, J (1966) On nonverbal interaction. Journal of Psychology, 63, 261-268

Margulis, S T (1977) Conceptions of privacy Current status and next steps The Journal of Social Issues, 33 (3), 5-21

Marshall, N J (1972) Privacy and environment Human Ecology, 1, 93-110

Mazur, A (1977) Interpersonal spacing on public benches in "contact" and "noncontact" cultures Journal of Social Psychology, 101, 53-58

McCallum, R , Rusbalt, C E., Hong, C K , Walden, T A , & Schopler, J (1979) Effects of resource availability and importance of behaviour on the experience of crowding Journal of Personality and Social Psychology, 37, 1304-1313

McCarthy, D P , & Saegert, S. (1979) Residential density, social overload and social withdrawl In J R. Aiello and A Baum (Eds), Residential crowding and design New York Plenum Press

McKechnie, G E (1974) ERI manual: Environmental response inventory Berkeley, CA·Consulting Psychologists Press

Mehrabian, A , & Diamond, S G. (1971) The effects of furniture arrangement, props, and personality on social interaction Journal of Personality and Social Psychology, 20, 18-30

Mercer, G W , & Benjamin, M L (1980) Spatial behaviour of university undergraduates in double occupancy residence rooms An inventory of effects. Journal of Applied Social Psychology, 10, 32-44

Merchant, C (1992) Radical ecology. The search for a livable world New York Routledge

Milgram, S (1970) The experience of living in cities Science, 167, 1461-1468

Miller, S , Rossbach, J., & Munson, R (1981) Social density and affiliative tendency as determinants of dormitory residential outcomes Journal of Applied Social Psychology, 11, 356-365

Newman, O (1972). Defensible space. New York·MacMillan.

Newman, O (1980) Community of interest. New York·Anchor Press/Doubleday.

Oldham, G R. (1988). Effects of changes in workspace partitions and spatial density on employee reactions A quasi experiment Journal of Applied Psychology, 73 (2), 253-258

O'Neal, E C., Brunault, M S , Carifio, M S., Troutwine, R , & Epstein, J. (1980) Effect of insult upon personal space preferences Journal of Non-Verbal Behavior, 5, 56-62

Osmond, H (1957) Function as the basis of psychiatric ward design Mental Hospitals, 8, 23-30

Patterson, A.H , & Chiswick, N R (1981) The role of the social and physical environment in privacy maintenance among the Iban of Borneo Journal of Environmental Psychology, 1, 131-139

Patterson, M (1973) Stability of non-verbal immediacy behaviors Journal of Experimental Social Psychology, 9, 97-109

Patterson, M , & Holmes, D.S (1966) Social interaction correlates of the MMPI extraversion-introversion scale American Psychologist, 21, 724-725.

Pedersen, D M (1979) Dimensions of privacy Perceptual and Motor Skills, 48, 1291-1297

Pedersen, D M (1982) Cross-validation of privacy factors Perceptual and Motor Skills, 55, 57-58

Pellegrini, R J , & Empey, J (1970) Interpersonal spatial orientation in dyads Journal of Psychology, 76, 67-70

Proshansky, H M., Ittelson, W H., & Rivlin, L G (1970) Freedom of choice and behavior in a physical setting In H Proshansky, W. Ittelson, and L Rivlin (Eds), Environmental psychology: Man and his physical setting New York· Holt, Rinehart & Winston, pp 173-183.

Ray, A (1990) 'Land ethics' and Tagore's vision of ecological harmony in modern environmental policy-making for improvement of quality of life Journal of Human Ecology, 1 (3), 301-303

Rotter, J.B (1966). Generalized expectancies for internal versus control of reinforcement. Psychological Monographs, 80 (1, Whole No. 609).

Ruback, R B & Pandey, J (1991). Crowding, perceived control, and relative power. An analysis of households in India Journal of Applied Social Psychology, 21 (4), 315-344

Rubin, Z , & Shenker, S. (1978). Friendship, proximity, and self-disclosure Journal of Personality, 46, 1-22

Russo, N (1967) Connotations of seating arrangements. Cornell Journal of Social Relations, 2, 37-44.

Rustemli, A , & Kokdemir, D (1993). Privacy dimensions and preferences among Turkish students. The Journal of Social Psychology, 133 (6), 807-814

Saegert, S (1978) High density environments: Their personal and social consequences In A Baum & Y.M. Epstein (Eds.), Human response to crowding Hillsdale, NJ: Erlbaum

Savinar, J (1975) The effect of ceiling height on personal space Man-Environment Systems, 5, 321-324

Schmidt, D E , & Keating, J P (1979).Human crowding and personal control An integration of the research, Psychological Bulletin, 86, 680-700

Schmitt, B H , Gilovich, T., Goore, N. & Joseph, L (1986) Mere presence and socio-facilitation One more time. Journal of Experimental Social Psychology, 22, 242-248.

Schopler, J , & Walton, M (1974). The effects of structure, expected enjoyment, and participants' internality-externality upon feelings of being crowded Unpublished manuscript, Department of Psychology, University of North Carolina at Chapel Hill

Sen, G (1992) Indigenous vision Peoples of India, attitudes to the environment Sage Publication, New Delhi and India International Centre, New Delhi

Severy, L J , Forsyth, D R , & Wagner, P J (1979). A multi-method assessment of personal space development in female and male, black and white children. Journal of Non-Verbal Behavior, 4, 68-86

Shaw, M E (1964) Communication networks. In L Berkowitz (Ed), Advances in experimental social psychology (Vol. 1) New York Academic Press, pp 111-147

Shaw, M E (1976) Group dynamics: The psychology of small group behavior (2nd Ed.). New York: McGraw-Hill

Sinha, D (1984) Community as target In E Staub, D Bar-Tal J Karylowski, J Reykowski (Eds.), Development and maintenance of prosocial behavior. New York & London: Plenum Press

Smith, D.E (1982) Privacy and corrections: A reexamination. American Journal of Community Psychology, 10, 207-224

Sommer, R (1962) The distance for comfortable conversation: A further study Sociometry, 25, 111-116

Sommer, R (1965) Further studies of small group ecology Sociometry, 28, 337-348

Sommer, R (1967) Classroom ecology Journal of Applied Behavioral Science, 3, 489-503.

Sommer, R (1969) Personal space The behavioral basis of design Englewood Cliffs, NJ Prentice-Hall

Steinzor, B (1950) The spatial factor in face to face discussion groups. Journal of Abnormal and Social Psychology, 45, 522-555

Stern, P C , & Dietz, T (1994) The value basis of environmental concern Journal of Social Issues, 50, 3, 65-84

Stokols, D (1972) On the distinction between density and crowding Some implications for further research Psychological Review, 79, 275-277.

Stokols, D (1976) The experience of crowding in primary and secondary environments Environment and Behavior, 8 (1), 49-86.

Stokols, D (1978) A typology of crowding experiences In A Baum and Y.M Epstein (Eds), Human response to crowding.Hillsdale, NJ Erlbaum

Stokols, D (1990). Instrumental and spiritual views of people-environment relations American Psychologist, 45 (5), 641-646

Stokols, D , Rall, M , Pinner, B , & Schopler, J (1973) Physical, social, and personal determinants of the perception of crowding Environment and Behaviour, 5, 87-115

Stokols, D , Smith, T E , & Prostor, J J (1975) Partitioning and perceived crowding in a public space American Behavioral Scientist, 18, 792-814.

Stone, E F., Gueutal, H G , Gardner, D G , & McClure, S (1983) A field experiment comparing information-privacy values,

Sinha, D (1984). Community as target. In E Staub, D.Bar-Tal J Karylowski, J Reykowski (Eds), Development and maintenance of prosocial behavior. New York & London: Plenum Press

Smith, D E (1982) Privacy and corrections: A reexamination American Journal of Community Psychology, 10, 207-224

Sommer, R (1962). The distance for comfortable conversation A further study Sociometry, 25, 111-116.

Sommer, R (1965) Further studies of small group ecology. Sociometry, 28, 337-348.

Sommer, R (1967) Classroom ecology Journal of Applied Behavioral Science, 3, 489-503.

Sommer, R (1969). Personal space: The behavioral basis of design Englewood Cliffs, NJ Prentice-Hall

Steinzor, B. (1950) The spatial factor in face to face discussion groups Journal of Abnormal and Social Psychology, 45, 522-555

Stern, P C , & Dietz, T. (1994) The value basis of environmental concern Journal of Social Issues, 50, 3, 65-84

Stokols, D (1972) On the distinction between density and crowding. Some implications for further research Psychological Review, 79, 275-277.

Stokols, D (1976) The experience of crowding in primary and secondary environments Environment and Behavior, 8 (1), 49-86

Stokols, D (1978) A typology of crowding experiences In A Baum and Y M Epstein (Eds), Human response to crowding Hillsdale, NJ Erlbaum.

Stokols, D (1990) Instrumental and spiritual views of people-environment relations American Psychologist, 45 (5), 641-646.

Stokols, D , Rall, M , Pinner, B , & Schopler, J (1973) Physical, social, and personal determinants of the perception of crowding Environment and Behaviour, 5, 87-115.

Stokols, D , Smith, T E , & Prostor, J J (1975) Partitioning and perceived crowding in a public space American Behavioral Scientist, 18, 792-814

Stone, E.F., Gueutal, H G , Gardner, D G., & McClure, S. (1983) A field experiment comparing information-privacy values, beliefs, and attitudes across several types of

Strodtbeck F., & Hook, H. (1961). The social dimensions of a 12-man jury table. Sociometry, 24, 397-415.

Sundstrom, E. (1977). Interpersonal behaviour and the physical environment In L S. Wrightsman (Second Edition), Social psychology, Belmont, CA. Wadsworth Publishing Company, Inc

Sundstrom, E. (1978). Crowding as sequential process Review of research on the effects of population density on humans In A Baum and Y M Epstein (Eds.), Human response to crowding. pp 31-116 Hillsdale, NJ·Erlbaum.

Sundstrom, E , & Altman, I (1974). Field study of territorial behaviour and dominance Journal of Personality and Social Psychology, 30, 115-124

Sundstrom, E , & Altman, I. (1976). Interpersonal relationships and personal space Research review and theoretical model Human Ecology, 4 (1), 47-67

Sundstrom, E , Herbert, R K , & Brown, D.W (1982) Privacy and communication in an open plan office: A case study Environment and Behaviour, 14, 379-392.

Sussman, N M , & Rosenfeld, H M. (1982) Influence of culture, language, and sex on conversational distance Journal of Personality and Social Psychology, 42, 66-74

Tennis, G H., & Dabbs, J M (1975) Sex, setting and personal space· First grade through college Sociometry, 38, 385-394

Thompson, D.J , & Baxter, J C (1973). Interpersonal spacing in two-person cross cultural interactions (S-9) Man-Environment Systems, 3, 115-117

Walden, T A , Nelson, P A., & Smith, D E (1981) Crowding, privacy and coping. Environment and Behaviour, 13, 205-224

Warren, C , & Laslett, B (1977) Privacy and secrecy A conceptual comparision Journal of Social Issues, 33 (3), 43-51.

Watson, O M & Graves, T D (1966) Quantitative research in proxemic behavior American Anthropologist, 68, 971-985

Weinstein, L (1968) The mother-child schema, anxiety, and academic achievement in elementary school boys Child development, 39, 257-264

Wener, R (1977) Non-density factors in the perception of crowding Dissertation Abstracts International, 37B, 3569-3570

Westin, A.F (1967). Privacy and freedom. New York:Atheneum.

White, R W. (1959). Motivation reconsidered The concept of competence Psychological Review, 66, 297-333

Wicker, A W. (1973). Undermanning theory and research· Implications for the study of psychological and behavioral effects of excess populations. Representative Research in Social Psychology, 4, 185-206

Willis, F N. (1966). Intial speaking distance as a function of the speakers' relationship Psychonomic Science, 5, 221-222

Winer, B J (1971) Statistical principles in experimental design. McGraw Hill, Inc

Wolfe, M (1978). Childhood and privacy. In I Altman and J.F Wohlwill (Eds), Children and the environment. New York, Plenum Press

Yoors, J (1967). The gypsies New York Simon and Schuster.

Zajonc, R B (1965). Social facilitation, Science, 149, 269-274

Zimring, C (1982) The built environment as a source of psychological stress Impact of buildings and cities on satisfaction and behavior In G W. Evans (Ed) Environmental stress New York Cambridge University Press

Appendices

Appendix 1A : The PER View Inventory (English Version) [Study 1]

Part I

In this section, questions will be asked regarding your views about individuals' relationship with the environment. Please answer these questions on the basis of your opinions and experiences. Please remember, there is no right or wrong answer to these questions. We are only interested in your personal views and opinions.

Q.1 What do you understand by the word ENVIRONMENT ?

Q.2 How important is environment in your life ?

1	2	3	4	5	6	7
Not at all important	Very low in importance	Less important	Neither less nor more important	Somewhat important	Very impor-tant	Extremely important

Please give the reason for your answer.

Q.3 What is your point of view/perspective about the environment? Please indicate to what extent you agree or disagree with the following statements.

[Minimalist]

Q.3.1 Environment has its own place and man has its own, and there is no significant relationship between the two.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Minimalist]

Q.3.2 Environment is an inanimate(lifeless) thing and man is a living entity, so there is no question of interaction between them.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Minimalist]

Q.3.3 In our country the way people show their carelessness towards the environment, it appears that they do not have any concern for environment.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Instrumental]

Q.3.4 Environment is basically/primarily meant for human beings, and therefore people should take full advantage of the environment.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Instrumental]

Q.3.5 There is nothing wrong if man has to exploit the environment completely for the welfare of mankind.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Instrumental]

Q.3.6 It is right to take advantage of the environment. Otherwise all the useful resources which we get from the environment will be wasted.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Spiritual]

Q.3.7 By being close to nature, people experience a special mental power, which shows that there is a spiritual relationship between man and environment.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Spiritual]

Q.3.8 Spiritual development of man is possible only when one is close to the environment.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Spiritual]

Q.3.9 The way we worship trees and rivers, it appears that environment is a manifestation of divine and supernatural powers.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Symbiotic]

Q.3.10 We take advantage of the environment for the smooth functioning of the whole universe/creation.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Symbiotic]

Q.3.11 If we take advantage of the environment, then in return we also take measures to protect the environment.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

[Symbiotic]

Q.3.12 Environment will remain so long as man protects it.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

Appendix 1A : The Privacy Inventory (English Version) [Study 1]

Part II

Dear friend:

In this section of the questionnaire, you will be asked some questions, which are related to social events of your daily life. It is observed that in these situtations also one form of your relationship with the environment is embedded. You may not have experienced some of these situations personally. Please answer these questions imagining yourself in these specific hypothetical situations.

Q.1 Before presenting the situations, I would like to ask you a general question. If you are familiar with the English language, you may have heard the word "PRIVACY". Please explain this concept in your own words.

Now I am going to describe some situations. Following the descriptions are some questions. Please answer these questions.

Situation 1
[Solitude]

Suppose you are sitting with your relatives or friends at home. The atmosphere is full of laughter and joy. Everyone is enjoying the situation, yet you suddenly feel that you want to go away from it all and to be alone.

1(A) How often have you experienced such a situation ?

1	2	3	4	5	6	7
Never	Rarely	Seldom	Sometimes	Quite often	Many times	Always

1(B) How much do you like/dislike this experience ?

1	2	3	4	5	6	7
Strongly dislike	Moderately dislike	Slightly dislike	Neither like nor dislike	Slightly like	Moderately like	Strongly like

1(C) When you go through such an experience, what steps do you take ?

1(D) How often do you get an opportunity to implement these steps ?

1	2	3	4	5	6	7
Never	Rarely	Seldom	Sometimes	Quite often	Many times	Always

Situation 2

[Intimacy]

Many times you get the chance to attend wedding or other social occasions. On these occasions you are with your relatives and friends. You suddenly feel that you want to spend some time with your close friends/relatives, and be away from others.

2(A) How often have you experienced such a situation ?

1	2	3	4	5	6	7
Never	Rarely	Seldom	Sometimes	Quite often	Many times	Always

2(B) How much do you like/dislike this experience ?

1	2	3	4	5	6	7
Strongly dislike	Moderately dislike	Slightly dislike	Neither like nor dislike	Slightly like	Moderately like	Strongly like

2(C) When you go through such an experience, what steps do you take ?

2(D) How often do you get an opportunity to implement these steps ?

1	2	3	4	5	6	7
Never	Rarely	Seldom	Sometimes	Quite often	Many times	Always

Situation 3

[Anonymity]

You go for work to your office almost everyday and there you interact with people who recognize you well. There are times when you feel that you want to go to a place where nobody knows you personally.

3(A) How often have you experienced such a situation ?

1	2	3	4	5	6	7
Never	Rarely	Seldom	Sometimes	Quite often	Many times	Always

3(B) How much do you like/dislike this experience ?

1	2	3	4	5	6	7
Strongly dislike	Moderately dislike	Slightly dislike	Neither like nor dislike	Slightly like	Moderately like	Strongly like

3(C) When you go through such an experience, what steps do you take ?

3(D) How often do you get an opportunity to implement these steps ?

1	2	3	4	5	6	7
Never	Rarely	Seldom	Sometimes	Quite often	Many times	Always

Situation 4
[Reserve]

You encounter people at the place where you reside or work. There are times when you try to show through your behaviour that you are not interested in interacting with them socially.

4(A) How often have you experienced such a situation ?

1	2	3	4	5	6	7
Never	Rarely	Seldom	Sometimes	Quite often	Many times	Always

4(B) How much do you like/dislike this experience ?

1	2	3	4	5	6	7
Strongly dislike	Moderately dislike	Slightly dislike	Neither like nor dislike	Slightly like	Moderately like	Strongly like

4(C) When you go through such an experience, what steps do you take ?

4(D) How often do you get an opportunity to implement these steps ?

1	2	3	4	5	6	7
Never	Rarely	Seldom	Sometimes	Quite often	Many times	Always

On the basis of above situations, please answer following questions. Please indicate your choice by marking a (√).

[Solit. Preference]
1 - Solitude, away from others -

1	2	3	4	5	6	7
Strongly dislike	Moderately dislike	Slightly dislike	Neither like nor dislike	Slightly like	Moderately like	Strongly like

[Intim. Preference]
2 - Away from others but with one close person -

1	2	3	4	5	6	7
Strongly dislike	Moderately dislike	Slightly dislike	Neither like nor dislike	Slightly like	Moderately like	Strongly like

[Anon. Preference]
3 - In the midst of people, but remaining anonymous -

1	2	3	4	5	6	7
Strongly dislike	Moderately dislike	Slightly dislike	Neither like nor dislike	Slightly like	Moderately like	Strongly like

[Reserve Preference]

4 - In the midst of people, but giving such indications that you are not interested in social interaction -

1	2	3	4	5	6	7
Strongly dislike	Moderately dislike	Slightly dislike	Neither like nor dislike	Slightly like	Moderately like	Strongly like

General Information

Name (optional) -

Age -

Gender - Male/Female

Education -

Occupation -

Monthly Income (Please √)

0600 - 1000 —
1001 - 1400 —
1401 - 1800 —
1801 - 2200 —
2201 - 2600 —
2601 - 3000 —
3000 and above —

Married/Unmarried -

Number of children - Boys - Girls -

Number of siblings(brothers & sisters) and their age -

In the family where you grew up whether it was a joint family or nuclear family -

Did you have a separate room in your family or did you share it with others? (Yes/No

If yes, with how many person you used to share the room?

With one person -
With two person -
With more than two person -

Appendix 1B : The PER View Inventory (Hindi Version)
[Study 1]

"प्रथम भाग" (PART-I)

*प्रश्नावली के इस प्रथम भाग में आपके और आपके पर्यावरण के बीच कैसा सम्बन्ध है , इस विषय पर प्रश्न पूछे जायेगे । कृपया आप इन प्रश्नो का उत्तर अपने विचारो और अनुभवों के आधार पर देने का कष्ट करें । स्मरण रहे , इन प्रश्नो मे **सही** या **गलत** उत्तर नही है - हमें केवल आपके व्यक्तिगत विचारो या मतों में रुचि है ।*

*प्रश्न-1 आप **पर्यावरण** शब्द से क्या समझते हैं ?*

प्रश्न-2 आप पर्यावरण को अपने जीवन मे कितना महत्वपूर्ण मानते है ।

1	2	3	4	5	6	7
बिल्कुल महत्वपूर्ण नही	बहुत कम महत्वपूर्ण	कम महत्वपूर्ण	न कम न अधिक महत्वपूर्ण	थोड़ा महत्वपूर्ण	काफी महत्वपूर्ण	अत्यधिक महत्वपूर्ण

कृपया अपने उत्तर का कारण भी स्पष्ट कीजिए ।

प्रश्न-3 आपका अपने पर्यावरण के प्रति क्या दृष्टिकोण है ? कृपया निम्नलिखित मे प्रत्येक से आप कितने सहमत या असहमत है, यह बताइये -

3 1 पर्यावरण अपनी जगह पर है और मनुष्य अपनी जगह पर और इन दोनो के बीच कोई भी महत्वपूर्ण सम्बन्ध नही है ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 2 पर्यावरण जड़ है और मनुष्य जीवन्त इसलिए इन दोनों में अन्त: क्रिया का सवाल ही नही उठता ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 3 हमारे देश मे जिस तरह लोग पर्यावरण के प्रति लापरवाही दिखाते है उससे लगता है कि मनुष्य का पर्यावरण से कोई सरोकार नही है ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 4 पर्यावरण मूलत. मनुष्य के लिए है और इसलिए मनुष्य को पर्यावरण से पूरा लाभ उठाना चाहिए ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 5 यदि मनुष्य को मानव कल्याण के लिए पर्यावरण का पूरी तरह से शोषण भी करना पड़े तो भी इसमें कोई खराबी नही है ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 6 मनुष्य का पर्यावरण से लाभ उठाना उचित ही है अन्यथा पर्यावरण से प्राप्त होने वाली बनस्पतिया, खनिज सम्पदायें व्यर्थ ही चली जाती ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 7 प्रकृति के निकट रहकर मनुष्य को एक अद्भुत मानसिक शक्ति मिलती है जिससे पता चलता है कि पर्यावरण का मनुष्य के जीवन से एक तरह का **अलौकिक सम्बन्ध** है ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 8 पर्यावरण मे रहते हुए ही मनुष्य का आध्यात्मिक विकास सम्भव है ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 9 हम जिस तरह पेड़ो और नदियों की पूजा करते है , उससे प्रतीत होता है कि पर्यावरण ईश्वर या दैवी शक्तियो का ही एक मूर्त रूप है ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 10 इस सृष्टि के सुचारु रूप से चलते रहने के लिए ही हम लोग पर्यावरण से लाभ उठाते है।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 11 यदि हम लोग पर्यावरण से लाभ उठाते है तो बदले मे हम भी पर्यावरण की रक्षा के उपाय करते है ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

3 12 पर्यावरण तभी तक है जब तक मनुष्य इसकी रक्षा करे ।

1	2	3	4	5	6	7
अत्यधिक असहमत	काफी असहमत	थोड़ा असहमत	न सहमत न असहमत	थोड़ा सहमत	काफी सहमत	अत्यधिक सहमत

Appendix 1B : The Privacy Inventory (Hindi Version)
[Study 1]

द्वितीय भाग (PART-II)

प्रिय मित्र,

प्रश्नावली के इस भाग मे मैं आपसे कुछ ऐसे प्रश्न पूछने जा रहा हूँ जिनका सम्बन्ध आपके दैनिक जीवन की कुछ सामाजिक परिस्थितियों से है । ऐसा देखा गया है कि इन परिस्थितियो मे भी, पर्यावरण से आपके सम्बन्ध का एक रूप सम्मिलित है । हो सकता है कि आपने व्यक्तिगत रूप से किसी परिस्थिति विशेष का अनुभव न किया हो मगर फिर भी आप अपने को कल्पना से इस परिस्थिति विशेष में रखते हुए प्रश्न का उत्तर देने का कष्ट करे ।

*1 इससे पहले कि मै आपके समक्ष परिस्थितियां प्रस्तुत करूँ, मैं आपसे एक सामान्य प्रश्न पूछना चाहता हूँ यदि आप अग्रेजी भाषा के शब्दो से परिचित है तो आपने "**PRIVACY**" शब्द को भी सुना होगा । कृपया इस शब्द का आशय अपने शब्दों में बतलाने का कष्ट करे ।*

अब मै आपके समक्ष परिस्थितिया प्रस्तुत करने जा रहा हूँ । इन परिस्थितियो के वर्णन के पश्चात उन पर आधारित कुछ प्रश्न पूछे गये हैं , कृपया इन प्रश्नों के उत्तर देने का कष्ट करे ।

परिस्थिति - 1

मान लीजिए कि आप अपने घर में अपने सगे सम्बन्धियो या मित्रो के साथ बैठे हैं। हसी मजाक चल रहा है। सबको मजा आ रहा है, फिर भी आपको अचानक ऐसा लगता है कि आप सबसे दूर अकेले में चले जाये।

1 (अ) आपको ऐसा अनुभव कितनी बार होता है ?

1	2	3	4	5	6	7
कभी नहीं	बहुत कम बार	कम बार	कभी कभी	काफी (अक्सर)	बहुत अधिक बार	बहुतबार (हमेशा)

1 (ब) ऐसा अनुभव आपको कितना अच्छा या बुरा लगता है ?

1	2	3	4	5	6	7
बहुत बुरा	काफी बुरा	थोड़ा बुरा	न अच्छा न बुरा	थोड़ा अच्छा	काफी अच्छा	बहुत अच्छा

1 (स) जब ऐसा अनुभव आपको होता है तब उसके लिए आप क्या उपाय करते है ?

1 (द) ऐसे उपाय उपयोग मे लाने के अवसर कितनी बार मिलते है ?

1	2	3	4	5	6	7
बिल्कुल नहीं	बहुत कम	थोड़ा कम	न कम न ज्यादा	थोड़ा ज्यादा	काफी ज्यादा	बहुत ज्यादा

परिस्थिति - 2

आपको कई बार शादी विवाह या अन्य सामाजिक समारोहो में जाने का अवसर मिलता है इन समारोहो मे आप अपने परिचितो/सम्बन्धियो के साथ रहते है। आपको अचानक लगता है कि आप अपना कुछ समय अपने निकट/नजदीकी मित्रो/सम्बन्धियो के साथ, **अन्य लोगों से अलग** भी व्यतीत करे।

2 (अ) आपको ऐसा अनुभव कितनी बार होता है ?

1	2	3	4	5	6	7
कभी नहीं	बहुत कम बार	कम बार	कभी कभी	काफी (अक्सर)	बहुत अधिक बार	बहुतबार (हमेशा)

2 (ब) ऐसा अनुभव आपको कितना अच्छा या बुरा लगता है ?

1	2	3	4	5	6	7
बहुत बुरा	काफी बुरा	थोड़ा बुरा	न अच्छा न बुरा	थोड़ा अच्छा	काफी अच्छा	बहुत अच्छा

2 (स) जब ऐसा अनुभव आपको होता है तब उसके लिए आप क्या उपाय करते है ?

2 (द) ऐसे उपाय उपयोग में लाने के अवसर कितनी बार मिलते है ?

1	2	3	4	5	6	7
बिल्कुल नहीं	बहुत कम	थोड़ा कम	न कम न ज्यादा	थोड़ा ज्यादा	काफी ज्यादा	बहुत ज्यादा

परिस्थिति -3

आप रोज ही अपने कार्यालय या काम पर जाते है और वहा पर आपकी अन्त क्रिया (Interaction) ऐसे लोगों से होती है जो आपको अच्छी तरह से पहचानते है । आपको कई बार ऐसा लगता है कि आप इन परिचितों से दूर, ऐसे स्थान पर चले जायें, जहा पर भले ही अन्य व्यक्ति हो , **मगर वे लोग व्यक्तिगत रूप से आपको जानते न हों ।**

3 (अ) आपको ऐसा अनुभव कितनी बार होता है ?

1	2	3	4	5	6	7
कभी नहीं	बहुत कम बार	कम बार	कभी कभी	काफी (अक्सर)	बहुत अधिक बार	बहुतबार (हमेशा)

3 (ब) ऐसा अनुभव आपको कितना अच्छा या बुरा लगता है ?

1	2	3	4	5	6	7
बहुत बुरा	काफी बुरा	थोड़ा बुरा	न अच्छा न बुरा	थोड़ा अच्छा	काफी अच्छा	बहुत अच्छा

3 (स) जब ऐसा अनुभव आपको होता है तब उसके लिए आप क्या उपाय करते है ?

3 (द) ऐसे उपाय उपयोग में लाने के अवसर कितनी बार मिलते है ?

1	2	3	4	5	6	7
बिल्कुल नही	बहुत कम	थोड़ा कम	न कम न ज्यादा	थोड़ा ज्यादा	काफी ज्यादा	बहुत ज्यादा

परिस्थिति - 4

आप जिस जगह पर रहते है या नौकरी/व्यवसाय करते हैं वहा पर अन्य व्यक्तियो से आपका सामना होता होगा । आप अपने व्यवहार के द्वारा यह प्रदर्शित करने का पूरा प्रयास करते है कि आपको अन्य व्यक्तियों के साथ **सामाजिक सम्पर्कों के प्रति जरा भी रुचि नहीं है ।**

4 (अ) आपको ऐसा अनुभव कितनी बार होता है ?

1	2	3	4	5	6	7
कभी नहीं	बहुत कम बार	कम बार	कभी कभी	काफी (अक्सर)	बहुत अधिक बार	बहुतबार (हमेशा)

4 (ब) ऐसा अनुभव आपको कितना अच्छा या बुरा लगता है ?

1	2	3	4	5	6	7
बहुत बुरा	काफी बुरा	थोड़ा बुरा	न अच्छा न बुरा	थोड़ा अच्छा	काफी अच्छा	बहुत अच्छा

4 (स) जब ऐसा अनुभव आपको होता है तब उसके लिए आप क्या उपाय करते है ?

4 (द) ऐसे उपाय उपयोग में लाने के अवसर कितनी बार मिलते हैं ?

1	2	3	4	5	6	7
बिल्कुल नहीं	बहुत कम	थोड़ा कम	न कम न ज्यादा	थोड़ा ज्यादा	काफी ज्यादा	बहुत ज्यादा

अब तक आपके समक्ष जो परिस्थितिया प्रस्तुत की गई थी उसी के आधार पर इस प्रश्न का भी उत्तर देने का कष्ट करें । कृपया अपनी पसन्द को चिन्ह (✓) लगाकर सूचित करे ।

1. एकान्त, अन्य लोगो से दूर -

1	2	3	4	5	6	7
अत्यधिक नापरान्द	काफी नापरान्द	थोड़ा नापसन्द	न पसन्द न नापसन्द	थोड़ा पसन्द	काफी पसन्द	अत्यधिक पसन्द

2- एक निकट व्यक्ति के साथ, अन्य लोगों से दूर -

1	2	3	4	5	6	7
अत्यधिक नापरान्द	काफी नापरान्द	थोड़ा नापसन्द	न पसन्द न नापसन्द	थोड़ा पसन्द	काफी पसन्द	अत्यधिक पसन्द

3- लोगों के बीच परन्तु अज्ञात रहकर -

1	2	3	4	5	6	7
अत्यधिक नापरान्द	काफी नापरान्द	थोड़ा नापसन्द	न पसन्द न नापसन्द	थोड़ा पसन्द	काफी पसन्द	अत्यधिक पसन्द

4 लोगो के बीच परन्तु ऐसे सकेत देते हुए कि आपको सामाजिक अन्त क्रिया या सम्पर्क मे बिल्कुल रुचि नही है -

1	2	3	4	5	6	7
अत्यधिक नापरान्द	काफी नापरान्द	थोड़ा नापरान्द	न परान्द न नापसन्द	थोड़ा पसन्द	काफी परान्द	अत्यधिक परान्द

General Information

नाम(वैकल्पिक)----------उम्र----------लिग---------

व्यवसाय----------शिक्षा----------

मासिक आय (कृपया ✓ करें)

600 - 1,000 ----
1001 - 1,400 ----
1401 - 1,800 ----
1801 - 2,200 ----
2201 - 2,600 ----
2601 - 3,000 ----
3000 या उससे ऊपर ----

विवाहित/अविवाहित----------

बच्चो की सख्या----------लडके----------लडकिया---------

भाई-बहनो की सख्या
तथा उनकी उम्र -

आप जिस परिवार मे बडे हुये, वह क्या संयुक्त परिवार था या एकल परिवार (Nuclear Family) था -

क्या आपके परिवार ने आपके लिये एक अलग कमरा दिया था या आप परिवार के अन्य सदस्यो के साथ कमरे को मिलजुल कर उपयोग करते थे ? (हॉ/नही)

यदि हॉ तो आप कितने लोग मिलजुल कर कमरे का उपयोग करते थे ?

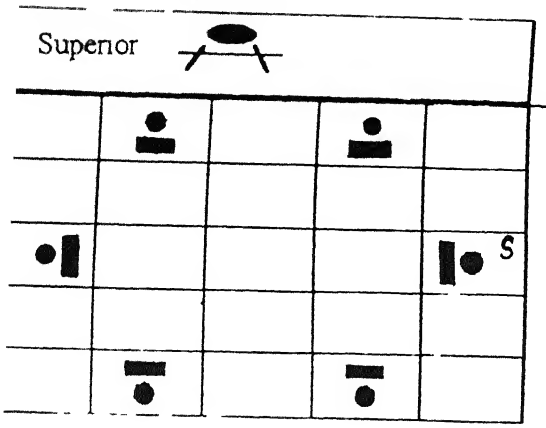
एक अन्य व्यक्ति के साथ ----------
दो अन्य व्यक्तियो के साथ -------
दो से अधिक व्यक्तियो के साथ -------

Appendix 2 : Seat placement by subjects (Responses)
[Study 2B]

Condition - 6 Seats (No partition chosen)

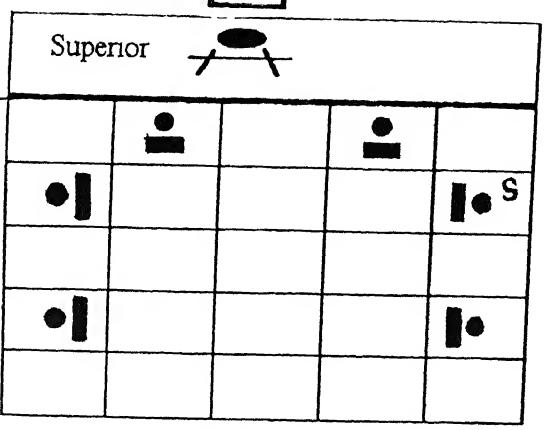
= Position of coworker with chair and table **S** = Subject's position

Subject 7

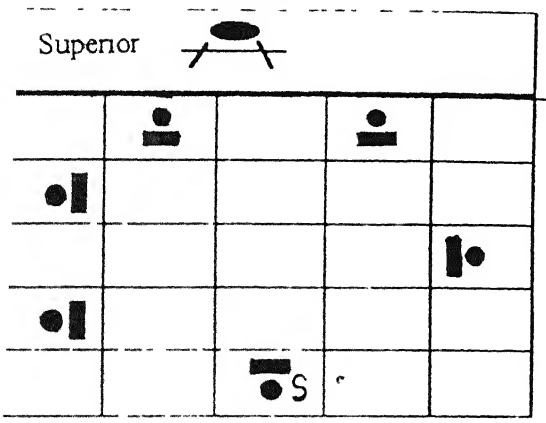


Partition

Subject 9

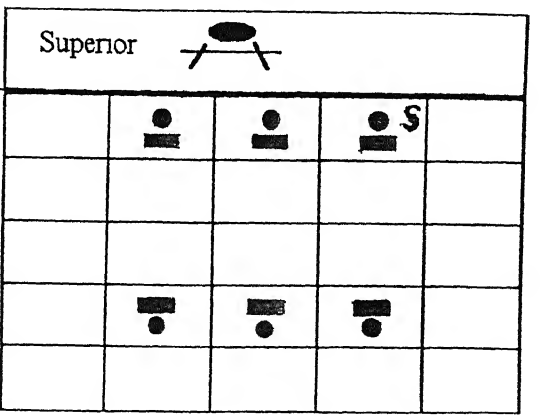


Subject 17

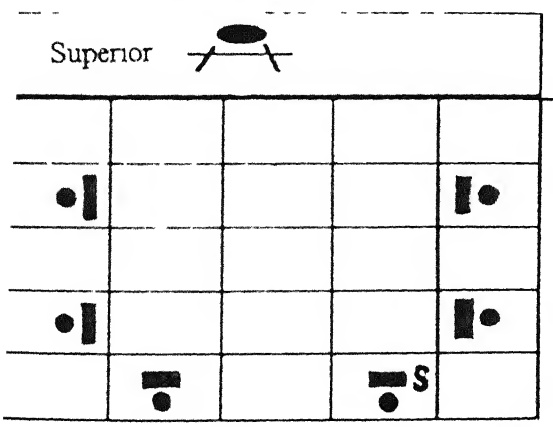


Partition

Subject 19

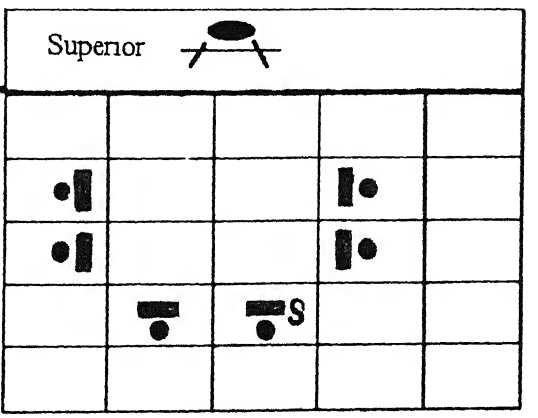


Subject 20



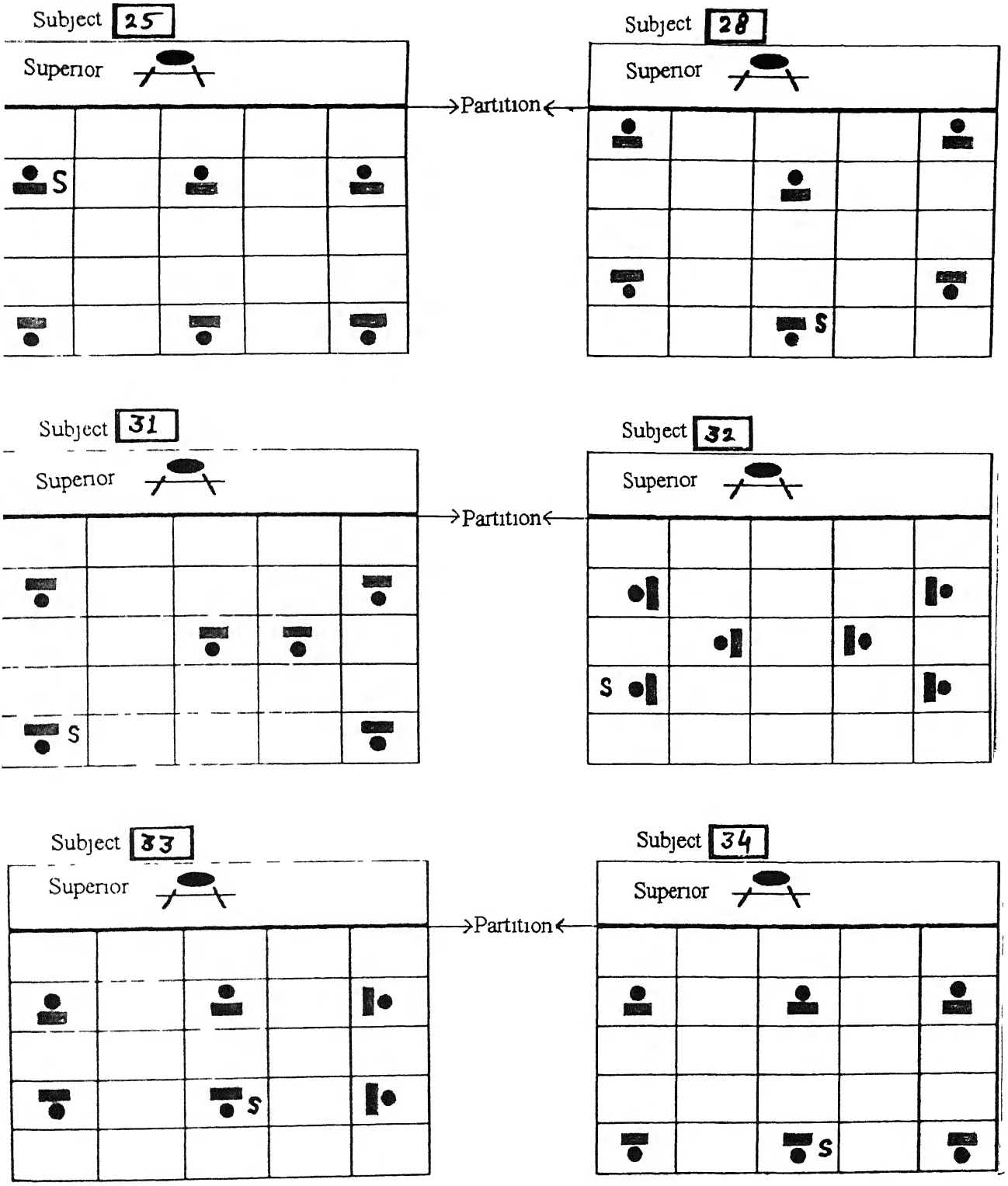
Partition

Subject 23



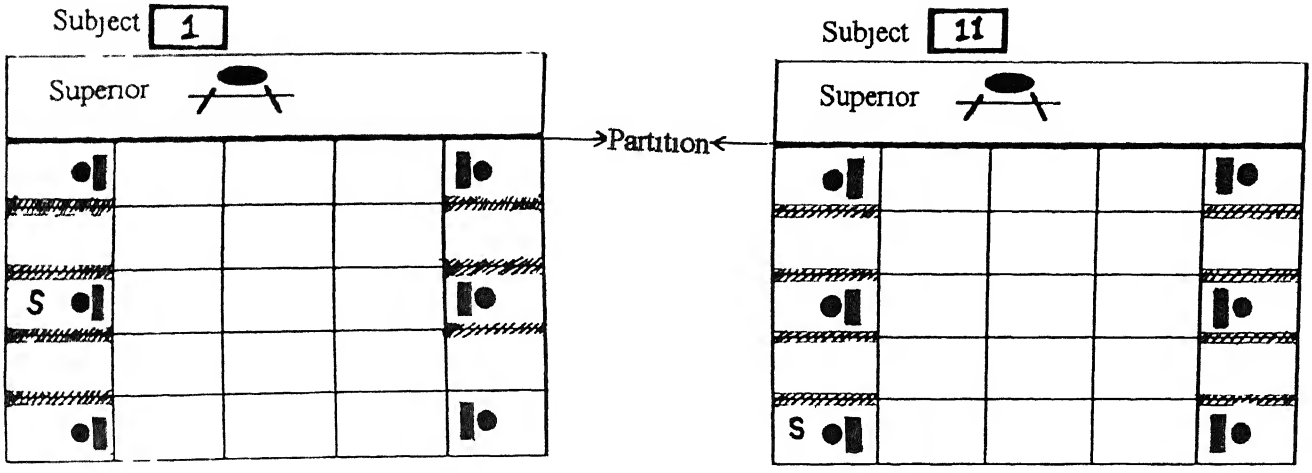
Condition - 6 Seats (No partition chosen)

= Position of coworker with chair and table S = Subject's position



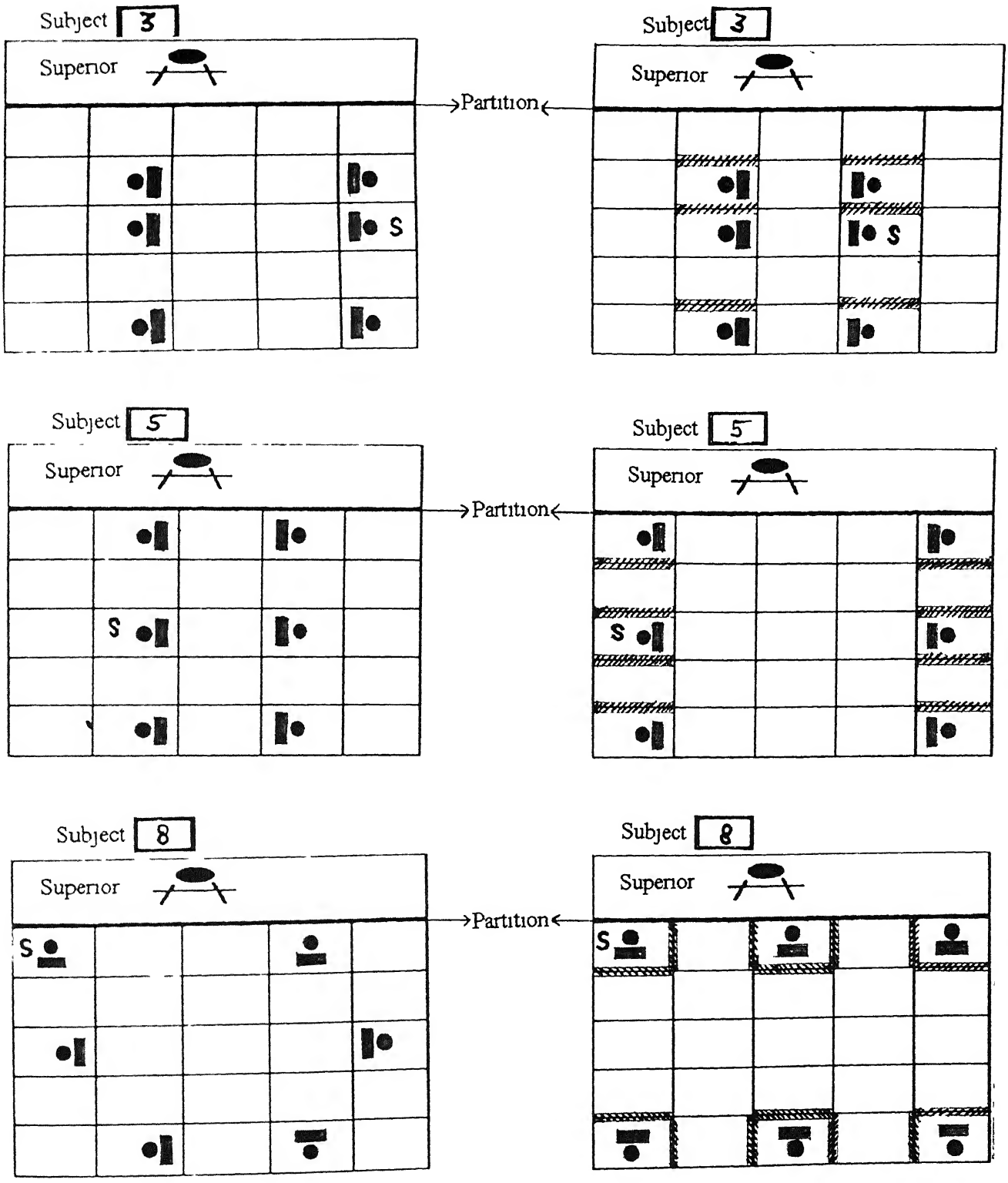
Condition - 6 Seats (Partition chosen)

: Position of coworker with chair and table **S** = Subject's position = Partition position



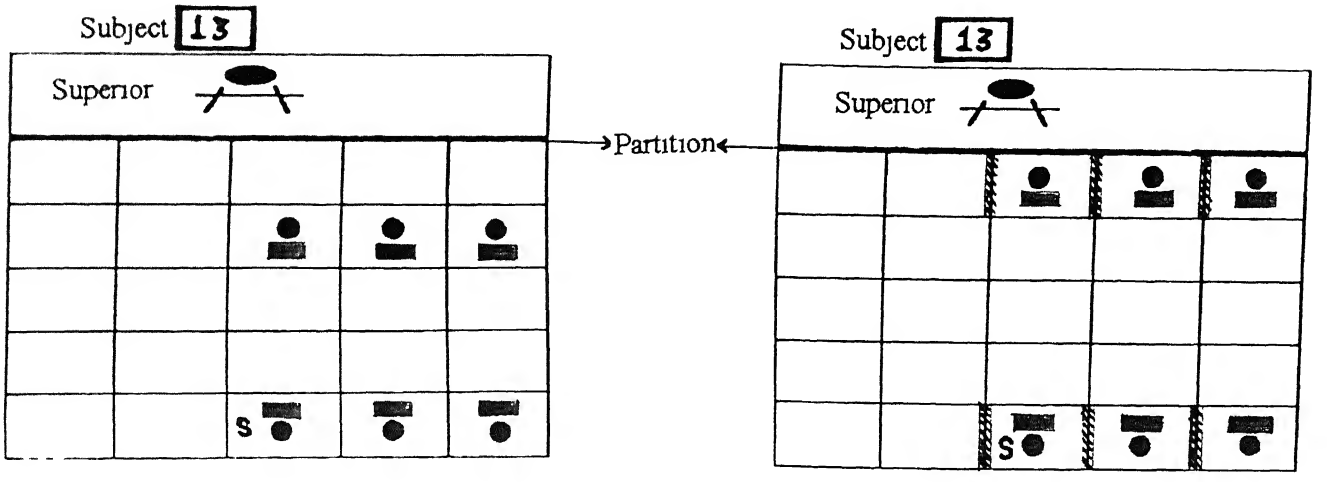
Condition - 6 Seats (Partition chosen, Seat placement modified)

= Position of coworker with chair and table S = Subject's position = Partition position



Condition - 6 Seats (Partition chosen, Seat placement modified)

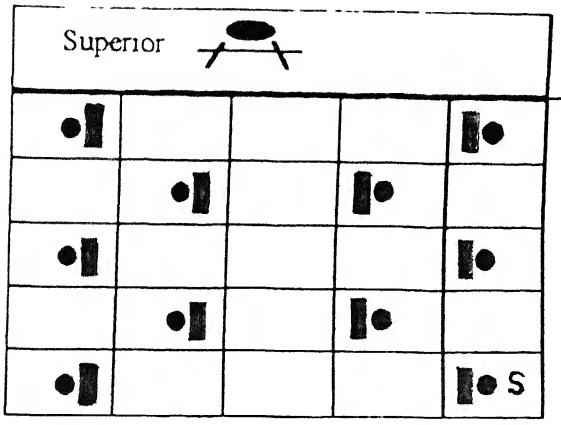
= Position of coworker with chair and table **S** = Subject's position = Partition position



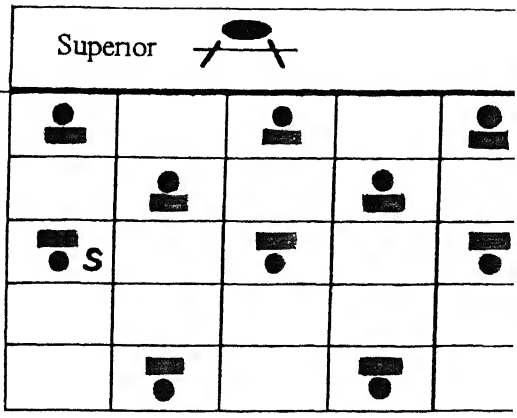
Condition - 10 Seats (No partition chosen)

= Position of coworker with chair and table S = Subject's position

Subject 10

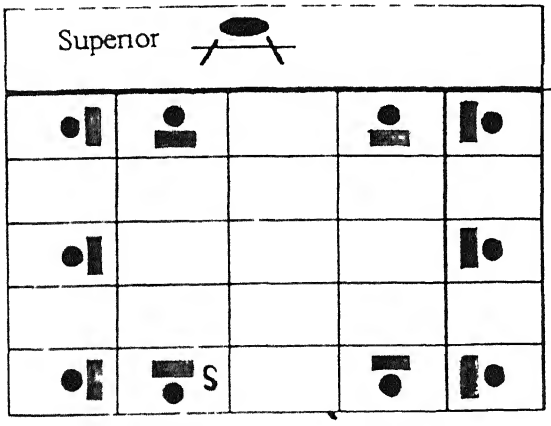


Subject 16



Partition

Subject 21

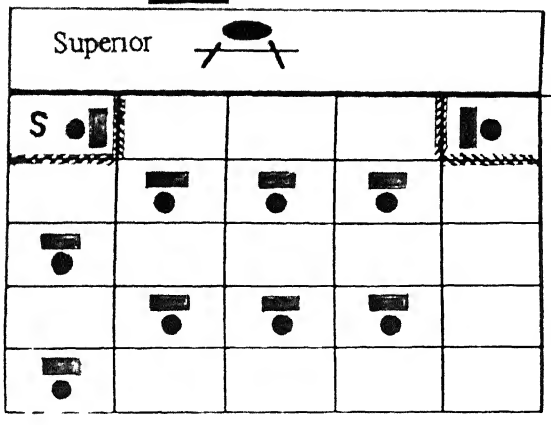


Partition

Condition - 10 Seats (Partition chosen)

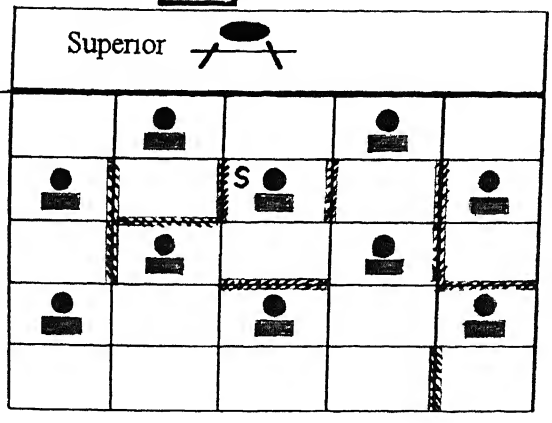
= Position of coworker with chair and table **S** = Subject's position = Partition position

Subject 4

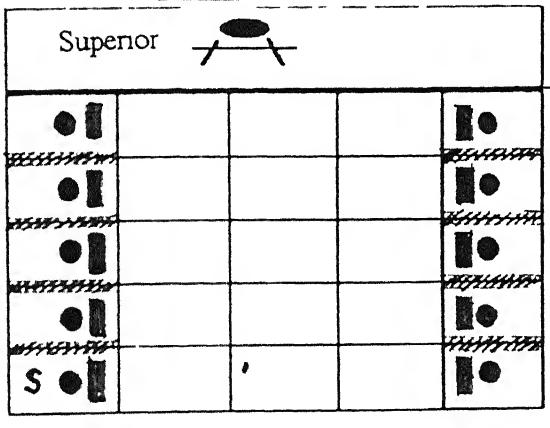


Partition

Subject 6

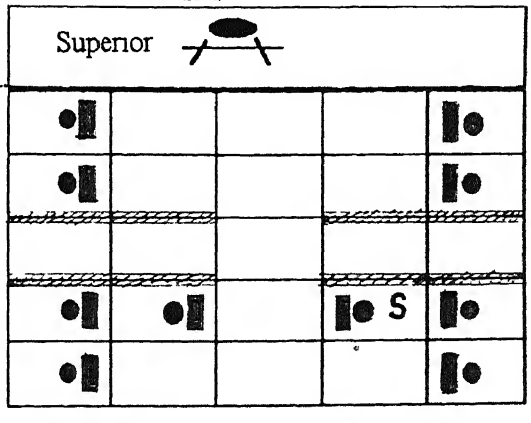


Subject 18

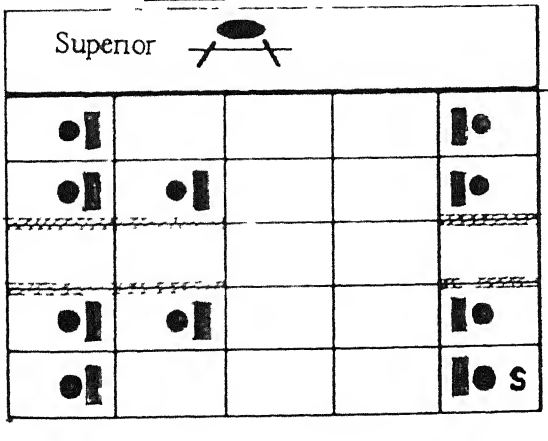


Partition

Subject 24

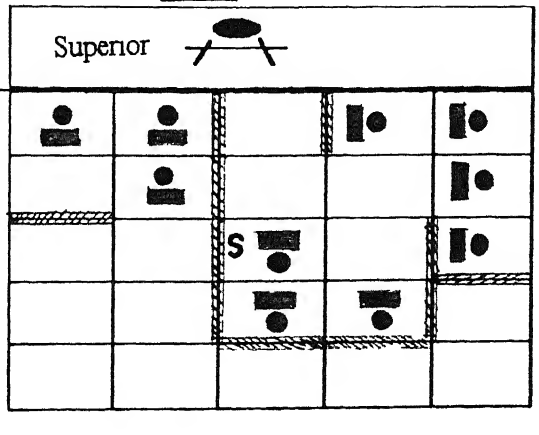


Subject 29



Partition

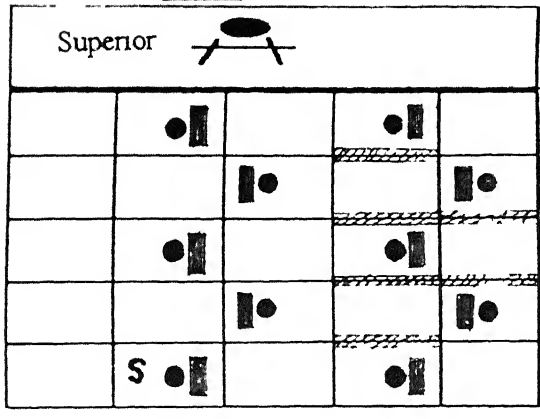
Subject 35



Condition - 10 Seats (Partition chosen)

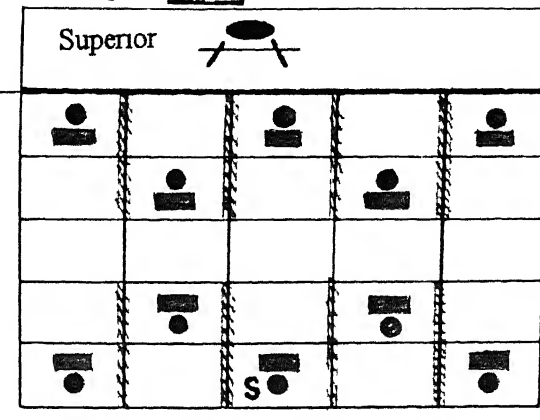
= Position of coworker with chair and table S = Subject's position = Partition position

Subject 36

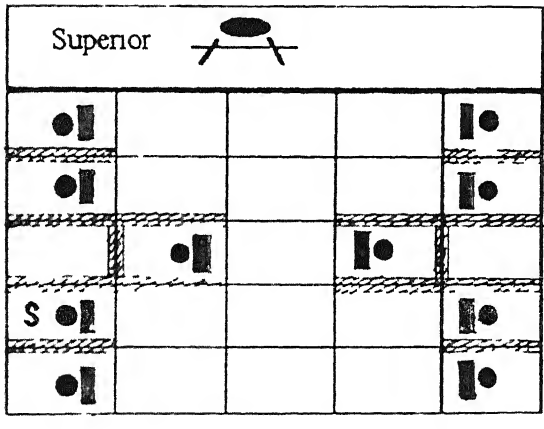


Partition

Subject 39



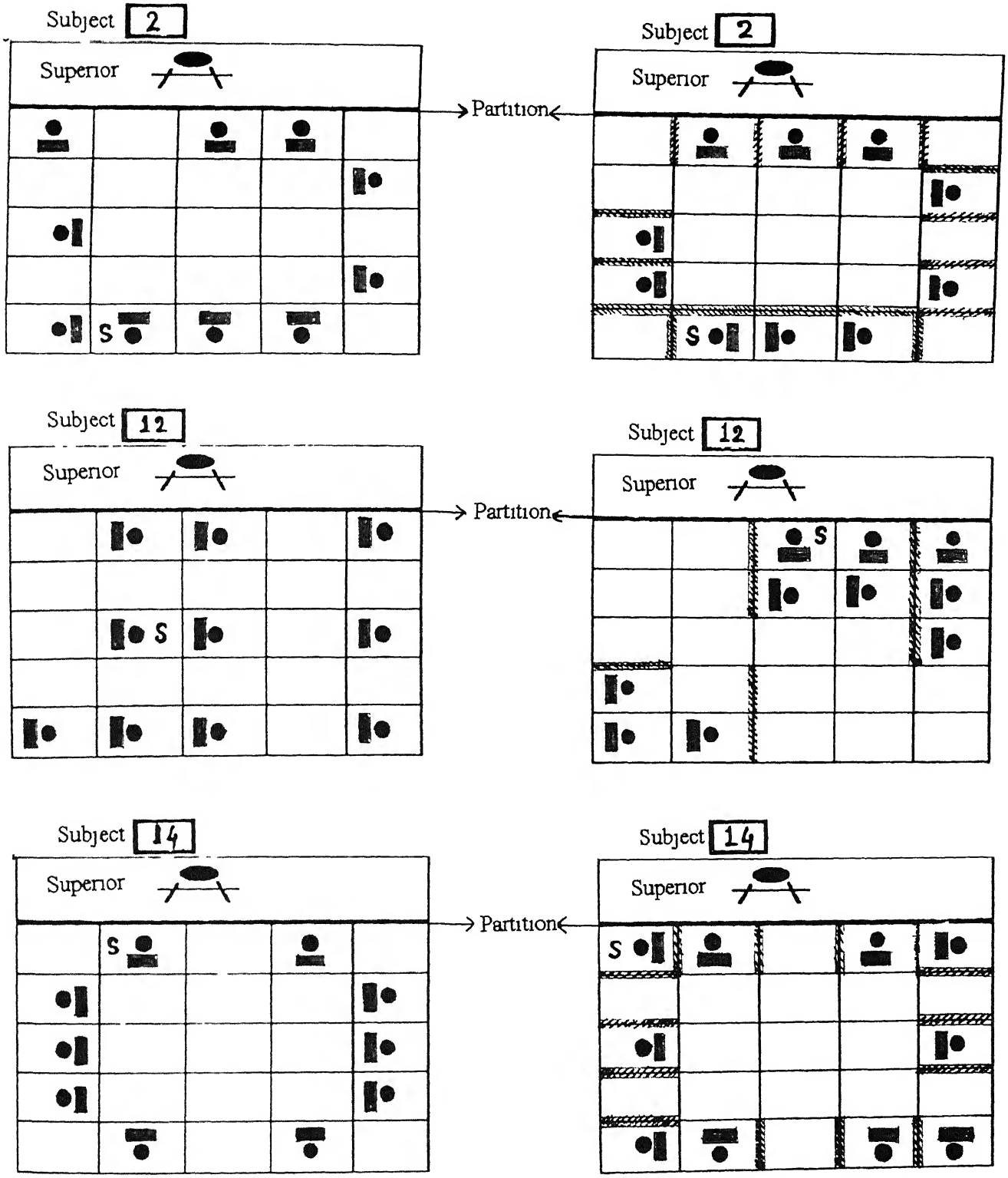
Subject 40



Partition

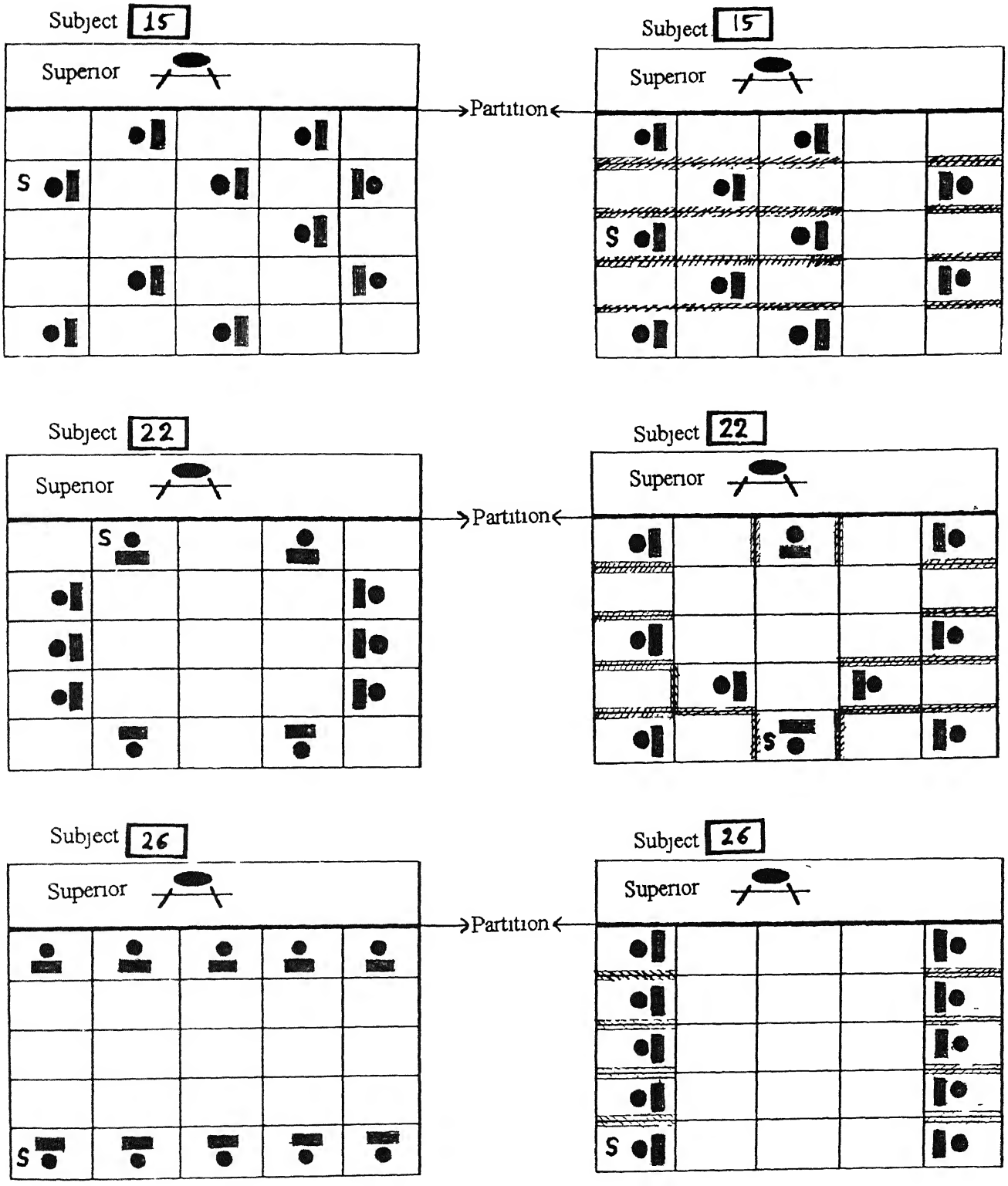
Condition - 10 Seats (Partition chosen, Seat placement modified)

= Position of coworker with chair and table **S** = Subject's position = Partition position



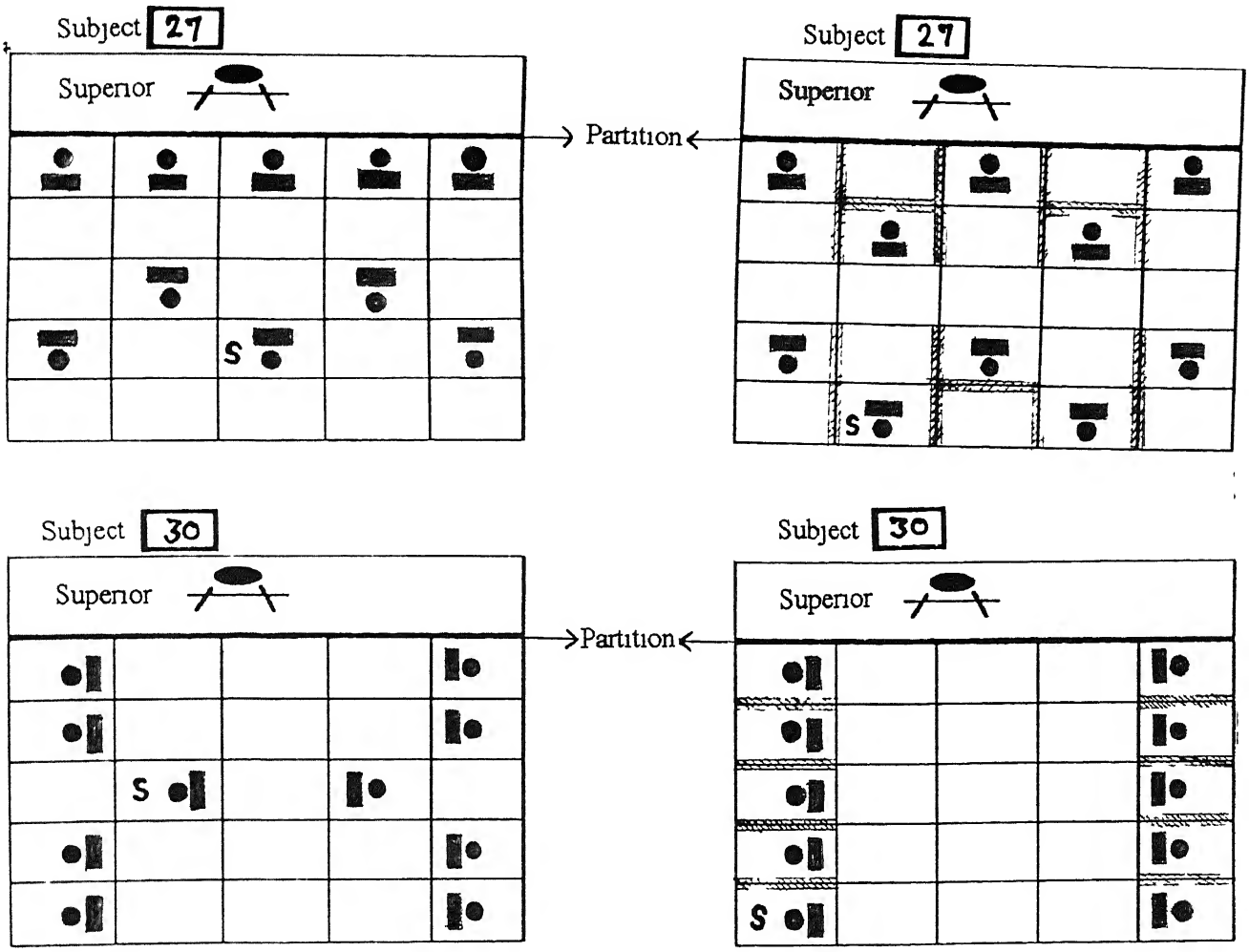
Condition - 10 Seats (Partition chosen, Seat placement modified)

= Position of coworker with chair and table S = Subject's position = Partition position



Condition - 10 Seats (Partition chosen, Seat placement modified)

= Position of coworker with chair and table S = Subject's position = Partition position



Appendix 3A : The Privacy Preference - Control Inventory (English Version) [Study 3]

Section I

(Privacy Preference)

[Solit Liking]
1 I like to spend my leisure time alone in my room listening to music or reading a book rather than being with friends.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Solit Liking]
2 In order to exercise my personal freedom, I prefer to be alone than with others.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Solit Reaction]
3 If I am unable to be alone, I feel stifled.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Solit Reaction]
4. When I am forced to be among a large number of persons, I often feel like moving away in order to be alone.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Intim Reaction]
5. When discussing personal matters with a close friend, I feel uncomfortable if he/she is accompanied by a person unknown to me

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%
Not at all true | True to a fair extent | Absolutely (totally) true

[Intim Reaction]
6 When I am in the middle of a conversation with a close friend, I lose enthusiasm if a stranger interrupts us

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%
Not at all true | True to a fair extent | Absolutely (totally) true

[Intim Liking]
7. In my spare time, instead of sitting in my room all alone, I prefer to be with my close friends

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%
Not at all true | True to a fair extent | Absolutely (totally) true

[Intim Liking]
8 In order to know myself better, I prefer to interact intimately with a few close friends than superficially with a large number of persons

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%
Not at all true | True to a fair extent | Absolutely (totally) true

[Reserve Liking]
9 Even with known persons, I prefer to talk, if necessary, about sports or politics rather than their or my own family life.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%
Not at all true | True to a fair extent | Absolutely (totally) true

[Reserve Liking]
10 I prefer the company of persons who are reserved than those who are sociable persons

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%
Not at all true | True to a fair extent | Absolutely (totally) true

[Reserve Reaction]
11. When someone tries to know more about my personal life, I feel awkward.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true | True to a fair extent | Absolutely (totally) true

[Reserve Reaction]
12. I feel happy in a party, when I am not bothered by others asking me about my job, or telling me the details of theirs.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true | True to a fair extent | Absolutely (totally) true

[Anon. Liking]
13. I prefer to spend my leisure time in the midst of unknown persons than with a person who is close to me.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true | True to a fair extent | Absolutely (totally) true

[Anon Liking]
14. Given the choice I would prefer to be in a group of unknown persons, than to be all alone or with known persons.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true | True to a fair extent | Absolutely (totally) true

[Anon Reaction]
15. In a public gathering, I feel uncomfortable if an acquaintance or friend greets me.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true | True to a fair extent | Absolutely (totally) true

[Anon Reaction]
16. I lose my sense of personal freedom when I am in a group of familiar persons.

0%---------10%-------20%-------30%--------40%---------50%--------60%---------70%---------80%---------90%---------100%

Not at all true | True to a fair extent | Absolutely (totally) true

Section II

(Control over Privacy)

Most of us have different amount of control over our social interactions -- being alone, being with close friends, remaining anonymous or maintaining reserve. To what extent are the following statements true for you? (Please indicate your response).

(1) I feel I have control over my physical settings and/or my own behaviour, so that I can, when I wish,

[Solit Regul]

(a) Be all alone.

0%--------10%-------20%-------30%-------40%--------50%-------60%--------70%--------80%--------90%--------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Intim Regul]

(b) Interact undisturbed with close friends/relatives.

0%--------10%-------20%-------30%-------40%--------50%-------60%--------70%--------80%--------90%--------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Reserve Regul]

(c) Avoid interacting with people even when they are present.

0%--------10%-------20%-------30%-------40%--------50%-------60%--------70%--------80%--------90%--------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Anon Regul]

(d) Remain anonymous even in the presence of people.

0%--------10%-------20%-------30%-------40%--------50%-------60%--------70%--------80%--------90%--------100%

Not at all true — True to a fair extent — Absolutely (totally) true

(2) I feel I have complete freedom..

[Solit. Freedom]

(a) in going away from a group, in order to be alone.

0%--------10%-------20%-------30%-------40%--------50%-------60%--------70%--------80%--------90%--------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Intim Freedom]

(b) in interacting with close friends/relatives.

0%---------10%-------20%-------30%--------40%--------50%--------60%--------70%--------80%--------90%--------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Reserve Freedom]

(c) in interacting/not interacting with people.

0%---------10%-------20%-------30%--------40%--------50%--------60%--------70%--------80%--------90%--------100%

Not at all true — True to a fair extent — Absolutely (totally) true

[Anon Freedom]

(d) in remaining anonymous even in the midst of people.

0%---------10%-------20%-------30%--------40%--------50%--------60%--------70%--------80%--------90%--------100%

Not at all true — True to a fair extent — Absolutely (totally) true

Section III

(Discrepancy between Desired/Actual Privacy)

These are some questions related to the amount of privacy desired by you and the actual amount which you really get in your life. Please indicate your response.

[Des Solit.]

(1) Suppose you wish to maintain your privacy by being alone, how much of this kind of privacy would you ideally wish to have?

0%-----10%------20%------30%------40%-------50%-------60%------70%-----80%-----90%------100%

[Actual Solit.]

How much of this kind of privacy do you actually have in your life?

0%-----10%------20%------30%------40%-------50%-------60%------70%-----80%-----90%------100%

[Des Intim]

(2) Suppose you wish to maintain your privacy by being with a close friend, how much of this kind of privacy would you ideally wish to have?

0%-----10%------20%------30%------40%-------50%-------60%------70%-----80%-----90%------100%

[Actual Intim.]

How much of this kind of privacy do you actually have in your life?

0%-----10%------20%------30%------40%-------50%-------60%------70%-----80%-----90%------100%

[Des Anon]

(3) Suppose you wish to maintain your privacy by being anonymous, how much of this kind of privacy would you ideally wish to have?

0%-----10%------20%------30%------40%-------50%-------60%------70%-----80%-----90%------100%

[Actual Anon.]

How much of this kind of privacy do you actually have in your life?

0%-----10%------20%------30%------40%-------50%-------60%------70%-----80%-----90%------100%

[Des Reserve]

(4) Suppose you wish to maintain your privacy by restricting your social interaction with others, how much of this kind privacy would you ideally wish to have?

0%-----10%------20%------30%------40%-------50%-------60%------70%-----80%-----90%------100%

[Actual Reserve]

How much of this kind of privacy do you actually have in your life?

0%-----10%------20%------30%------40%-------50%-------60%------70%-----80%-----90%------100%

General Information

Name(Optional)_____Age_____Years Sex_____
Education_____

Income Range(Optional) Please indicate your choice. ✓

Under Rs.3,000---------
Between Rs.3,001 and Rs 5,000---------
Between Rs.5,001 and Rs 7,000---------
Between Rs 7,001 and Rs 9,000---------
Over Rs.9,001----------

Marital Status_____

Number of Children_____Son_____Daughter_____

Number of Siblings: Brother_____Sister_____

In the family where you have grown up, did you have a separate room for yourself?

Yes/No.

If no, then please indicate the number of persons with whom you shared your room.

With one person_____
With two persons_____
With more than two persons_____

Thank you very much for your cooperation.

Nachiketa Tripathi

Appendix 3B : The Privacy Preference - Control Inventory (Hindi Version) [Study 3]

Section I

मित्र ,

अब मै आपसे जो प्रश्न पूछूगा उनका सम्बन्ध Privacy से है, आपको यह बताना है कि प्रत्येक कथन आपके ऊपर किस हद तक लागू होता हैं । कृपया इसके लिऐ आप अपनी पसन्द को Scale पर दर्शाइए ।

(1) मै अपने खाली समय मे मित्रो के साथ रहने के बजाय अकेले अपने कमरे में रहकर सगीत सुनने मे या कोई किताब पढने मे व्यतीत करना पसन्द करता हूँ ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(2) दूसरो के साथ रहने के बजाय मै अपनी व्यक्तिगत स्वतन्त्रता के लिऐ अकेले रहना पसन्द करता हूँ ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(3) यदि मै अकेला नही रह पाता हूँ तो घुटन महसूस करता हूँ ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(4) जब भी मै बहुत से लोगो के साथ रहने के लिऐ बाध्य होता हूँ तो मुझे प्राय ऐसा लगता है कि एकान्त पाने के लिए मुझे लोगो से दूर जाना चाहिऐ ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(5) जब मै किसी व्यक्तिगत मसले पर किसी निकट मित्र से वार्तालाप कर रहा होता हूँ, तब मुझे बहुत असहजता महसूस होती है यदि उस व्यक्ति के साथ कोई अजनबी व्यक्ति है ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(6) जब मै किसी निकट मित्र के साथ वार्तालाप कर रहा होता हूँ और कोई अजबनी व्यवधान डालता है तो मै वार्तालाप के प्रति अपना उत्साह खो बैठता हूँ ।

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बिल्कुल नहीं *काफी हद तक* *पूरी तरह से*

(7) अकेले कमरे मे बैठे रहने के बजाय खाली समय में मै अपने मित्रो के साथ रहना पसन्द करता हूँ ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(8) अपने बारे मे अच्छी तरह से जानने के लिऐ मै कुछ निकट मित्रो से अतरग रूप से मिलना-जुलना पसन्द करता हूँ बजाय बहुत सारे लोगों से बाहरी तौर पर मिलने से ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(9) भले ही मै परिचित व्यक्तियो के साथ रहूँ, यदि आवश्यक हुआ तो मै खेल या राजनीति पर बात करना पसन्द करता हूँ बजाय उनकी या अपनी निजी जिन्दगी के बारे मे बात करने के।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(10) मै ऐसे लोगो का साथ पसन्द करता हूँ जो अमिलनसार है बजाय उन लोगो के जो बहुत सामाजिक है ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(11) जब कभी कोई मेरी निजी जिन्दगी के बारे मे ज्यादा जानने की कोशिश करता है तो मुझे बहुत अजीब सा लगता है ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(12) मुझे ऐसे प्रीतिभोज मे अच्छा लगता है जहॉ पर लोग मेरी नौकरी के बारे में जानने का या अपने बारे में बताने का प्रयास नही करते है ।

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बिल्कुल नहीं — काफी हद तक — पूरी तरह से

(13) मै अपना खाली समय अपरिचित लोगो के बीच मे व्यतीत करना पसन्द करता हूँ बजाय ऐसे व्यक्ति के साथ जो मेरे करीब है ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(14) यदि मेरे पास विकल्प है तो मै अपरिचित व्यक्तियो के समूह मे रहना पसन्द करूगा बजाय अकेले रहने के या परिचित व्यक्तियों के समूह में रहने के ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(15) सामाजिक समारोहो मे, मै बहुत असहज महसूस करता हूँ यदि कोई परिचित मेरा अभिवादन करता है ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(16) जब मै परिचित लोगो के समूह मे होता हूँ तो मै अपनी व्यक्तिगत स्वतन्त्रता मे कमी महसूस करता हूँ ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

Section II

हम सभी का सामाजिक अन्तर्क्रिया पर अलग-अलग नियत्रण होता है, उदाहरण के तौर पर - अकेले रहने मे, किसी निकट मित्र के साथ रहने मे, गुमनाम बने रहने मे, या अपने को लोगो से दूर रखने में । कृपया आप यह बताने का कष्ट करे कि निम्नलिखित कथन आप पर किस हद तक लागू होते है ।

(1) मुझे लगता है कि मेरा वातावरण के भौतिक पक्ष या।और अपने व्यवहार पर नियत्रण हैं जिससे मै जब चाहूँ ....

(अ) एकदम अकेले रह सकता हूँ ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(ब) बिना किसी बाधा के अपने निकट मित्रों।सम्बन्धियों से मिलजुल सकता हूँ ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(स) लोगो की उपस्थिति मे भी उनसे मिलने-जुलने से बच सकता हूँ ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(द) लोगो की उपस्थिति मे भी अज्ञात बना रह सकता हूँ ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(2) मुझे लगता है कि मुझे पूरी आजादी है .

(अ) लोगो से दूर जाने की, एकान्त मे रहने के उद्देश्य से ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(ब) निकट सम्बन्धियो।मित्रो से मिलने-जुलने की ।

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बिल्कुल नही — काफी हद तक — पूरी तरह से

(स) लोगो से मिलने। न मिलने की ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

(द) लोगो के बीच मे रहकर भी अज्ञात बने रहने की ।

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बिल्कुल नही *काफी हद तक* *पूरी तरह से*

Section III

अब कुछ ऐसे प्रश्न प्रस्तुत किये जायेगे जिसमे आप जितनी Privacy चाहते है और वास्तव मे जितनी Privacy आपको मिलती है, उनका वर्णन हैं । कृपया इन प्रश्नो का उत्तर देने का कष्ट करे ।

(1) मान लीजिऐ आप Privacy पाने के लिऐ अकेले मे रहना चाहते हैं । कृपया यह बताने का कष्ट करे कि आर्दश रूप से आप इस तरह की Privacy कितनी पाना चाहते है ?

0%——10%——20%——30%——40%——50%——60%——70%——80%——90%——100%

-आपकी जिन्दगी मे वास्तविक रूप मे आपको इस तरह की Privacy कितनी मिलती है ?

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(2) मान लीजिऐ आप Privacy पाने के लिऐ किसी निकट मित्र के साथ रहना चाहते है । कृपया यह बताने का कष्ट करे कि आर्दश रूप से आप इस तरह की Privacy कितनी पाना चाहते है ?

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आपकी जिन्दगी मे वास्तविक रूप मे आपको इस तरह की Privacy कितनी मिलती है ?

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(3) मान लीजिऐ आप Privacy पाने के लिऐ गुमनाम बने रहना चाहते हैं । कृपया यह बताने का कष्ट करें कि आर्दश रूप से आप इस तरह की Privacy कितनी पाना चाहते है ?

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-आपकी जिन्दगी मे वास्तविक रूप मे आपको इस तरह की Privacy कितनी मिलती है ?

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(4) मान लीजिऐ आप Privacy पाने के लिऐ अपनी सामाजिक अतर्क्रिया को नियत्रित रखना चाहते है । कृपया यह बताने का कष्ट करे कि आर्दश रूप से आप इस तरह की Privacy कितनी पाना चाहते है ?

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-आपकी जिन्दगी में वास्तविक रूप मे आपको इस तरह की Privacy कितनी मिलती है ?

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आपके सहयोग के लिऐ धन्यवाद ।

General Information

नाम(वैकल्पिक)----------उम्र----------लिग---------

व्यवसाय----------शिक्षा----------

मासिक आय (वैकल्पिक)--------

Under Rs 3,000----------
Rs 3,001 to Rs 5,000----------
Rs 5,001 to Rs 7,000----------
Rs 7,001 to Rs 9,001----------
Over Rs 9,001----------

विवाहित।अविवाहित----------

बच्चो की सख्या----------लडके----------लडकिया----------

भाई-बहनो की सख्या---------भाई---------बहन--------

आप जिस परिवार मे बडे हुये, क्या वहॉ पर आपको रहने के लिऐ एक अलग कमरा दिया गया था ? -------हॉ/नही

यदि नही तो आप कितने लोगो के साथ मिलकर कमरे का उपयोग करते थे ?

१ व्यक्ति के साथ ----------
२ व्यक्तियो के साथ --------
२ से अधिक व्यक्तियो के साथ --------